

P55-6S



Image for illustration purposes only.

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.

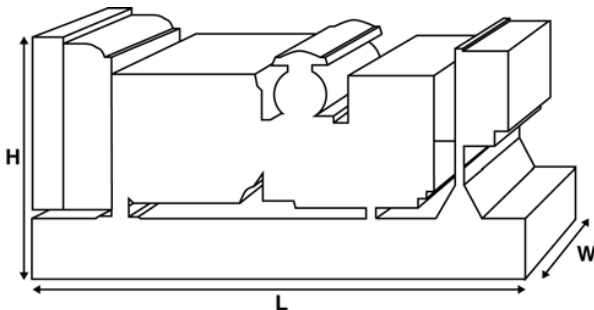
Standby Rating

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.



Ratings and Performance Data

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 Fabricated Steel

Circuit Breaker Type: 3 Pole MCCB

Frequency: 50 Hz 60 Hz

Engine Speed: RPM 1500 -

Fuel Tank Capacity: litres (US gal) 180 (47.6)

Fuel Consumption: l/hr (US gal/hr)

(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 and Weights

Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	Dry kg (lb)	Wet 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.

Head Office

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Engine Technical Data

No. of Cylinders / Alignment:	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: l (cu. in)	4.4 (268.5)		
Moment of Inertia: kg m ² (lb/in ²)	1.14 (3896)		
Engine Electrical System:			
- Voltage / Ground	12/Negative		
- Battery Charger Amps	65		
Weight: kg (lb)	- Dry	401 (884)	
	- Wet	408 (899)	

Performance

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

Fuel System

Fuel Filter Type:	Replaceable Element			
Recommended Fuel:	Class A2 Diesel or BSEN590			
Fuel Consumption: l/hr (US gal/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)	
60 Hz	-	-	-	-

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

Air Systems

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

Cooling System

	50 Hz	60 Hz
Cooling System Capacity: l (US gal)	16.5 (4.4)	-
Water Pump Type:	Centrifugal	
Heat Rejected to Water & Lube Oil:		
kW (Btu/min)	- Prime 47.0 (2673)	-
	- Standby 46.8 (2661)	-
Heat Radiation to Room: Heat radiated from 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: m ³ /min (cfm)	84.0 (2966)	-
External Restriction to Cooling Airflow: Pa (in H ₂ 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: l (US gal)	8.0 (2.1)	
Oil Pan: l (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: kPa (in Hg)	12.0 (3.5)	-
Exhaust Gas Flow: m ³ /min (cfm)		
- Prime	11.2 (396)	-
- Standby	12.3 (435)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	570 (1058)	-
- Standby	627 (1161)	-



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Alternator Physical Data	
Manufactured for FG Wilson by:	Leroy Somer
Model:	LLB3114D
No. of Bearings:	1
Insulation Class:	H
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	
	240V	230V	220V		
Data Item					
Motor Starting Capability* kVA	145	136	128		
Short Circuit Capacity** %	300	300	300		
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				
Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW
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

Output Ratings Technical Data 60 Hz				
Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW

Documentation

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

Generator 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.



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