

## www.FGWilson.com

# P550-2



Ratings at 0.8 power factor.

Please refer to the output ratings technical data section for specific generator set outputs per voltage.

#### **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, EN590.

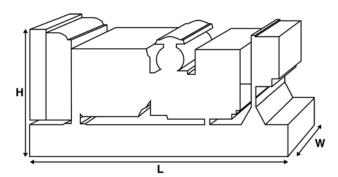




Image for illustration purposes only.

Ratings and Performance Data		
Engine Make & Model:	Perkins® 2506[	D-E15TAG2
Alternator manufactured for FG Wilson by:	Leroy Somer	
Alternator Model:	LL6114F	
Control Panel:	PowerWizard 1.	1+
Base Frame:	Heavy Duty Fab	ricated Steel
Circuit Breaker Type:	3 Pole MCCB	
Frequency:	50 Hz	60 Hz
Engine Speed: RPM	1500	-
Fuel Tank Capacity: litres (US gal)	1083	(286.1)
Fuel Consumption: I/hr (US gal/hr)		
(100% Load) - Prin	me 104.0 (27.5)	-
- Stand	by 113.9 (30.1)	-

#### **Available Options**

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

- Upgrade to CE Certification
- A wide range of Sound Attenuated Enclosures
- A variety of generating 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 ar	nd Weights			
<b>Length</b> (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	<b>Dry</b> kg (lb)	<b>Wet</b> kg (lb)
3787 (149.1)	1481 (58.3)	2193 (86.4)	3933 (8671)	3981 (8777)
Dry = With Lube	Oil	Wet = With Lube	e Oil and Coolant	

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

Engine Technical Data		
No. of Cylinders / Alignm	ent:	6 / In Line
Cycle:		4 Stroke
Bore / Stroke: mm (in)		137.0 (5.4)/171.0 (6.7)
Induction:		Turbocharged Air To Air Charge Cooled
Cooling Method:		Water
Governing Type:		Electronic
Governing Class:		ISO 8528 G2
Compression Ratio:		16.0:1
Displacement: I (cu. in)		15.2 (927.6)
Moment of Inertia: kg m² (	lb/in²)	4.29 (14660)
Engine Electrical System:		
- Voltage / C	Ground	24/Negative
- Battery Charger	r Amps	70
Weight: kg (lb)	- Dry	1633 (3600)
	- Wet	1714 (3779)

Performance		50 Hz	60 Hz
Engine Speed: rpm		1500	-
Gross Engine Power: kW (hp	o)		
-1	Prime	453.0 (607.0)	-
- Sto	andby	497.0 (666.0)	-
BMEP: kPa (psi)			
-1	Prime	2396.0 (347.5)	-
- Sto	andby	2629.0 (381.3)	-

Fuel System			

Fuel Filter Type:Replaceable Element ClassRecommended Fuel:A2 Diesel or BSEN590

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

	110%	100%	75%	50%
Prime	Load	Load	Load	Load
50 Hz	113.9 (30.1)	104.0 (27.5)	80.7 (21.3)	58.7 (15.5)
60 Hz	-	-	-	-

	100%	75%	50%
Standby	Load	Load	Load
50 Hz	113.9 (30.1)	87.5 (23.1)	63.0 (16.6)
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:		Non Ca	nister
Combustion Air Flow: m³/min (o	cfm)		
	- Prime	34.5 (1218)	-
	- Standby	36.0 (1271)	-
Max. Combustion Air Intake Restriction: kPa (in H <sub>2</sub> O)		6.2 (24.9)	-

Cooling System	50 Hz	60 Hz
Cooling System Capacity: I (US gal)	48.0 (12.7)	-
Water Pump Type:	Centrif	<sup>f</sup> ugal
Heat Rejected to Water & Lube Oil:		
kW (Btu/min) - Primo	e 170.0 (9668)	-
- Standb	y 185.0 (10521)	-
Heat Radiation to Room: Heat radiated from	m engine and alternator	
kW (Btu/min) - Prime	e 48.1 (2735)	
- Standb	y 61.7 (3509)	
Radiator Fan Load: kW (hp)	18.6 (24.9)	-
Radiator Cooling Airflow: m³/min (cfm)	555.0 (19600)	-
External Restriction to Cooling Airflow: Pa (in H <sub>2</sub> O)	125 (0.5)	-

Designed to operate in ambient conditions up to  $50^{\circ}$ C ( $122^{\circ}$ F). Contact your local FG Wilson Dealer for power ratings at specific site conditions.

Lubrication System	
Oil Filter Type:	Eco, Full Flow
Total Oil Capacity: I (US gal)	62.0 (16.4)
Oil Pan: I (US gal)	53.0 (14.0)
Oil Type:	API CI4 15W-40
Oil Cooling Method:	Water

Exhaust System	50 Hz	60 Hz
Maximum Allowable Back Pressure: kPa (in Hg)	6.8 (2.0)	-
Exhaust Gas Flow: m³/min (cfm)		
- Prime	84.0 (2966)	-
- Standby	87.0 (3072)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	420 (788)	-
- Standby	420 (788)	-

Alternator Physical Data	
Manufactured for FG Wilson by:	Leroy Somer
Model:	LL6114F
No. of Bearings:	1
Insulation Class:	Н
Winding Pitch Code:	2/3 - 6
Wires:	12
Ingress Protection Rating:	IP23
Excitation System:	SHUNT
AVR Model:	R250

2250						
+/- 0.5%						
50						
2.0%						
4.0%						
Suppression is in line with European Standard EN61000-6						
Radiant Heat: kW (Btu/min)						
26.7 (1518)						
-						

Alternator Performance Data:		50	Hz	
Data Item	415/240V	400/230V	380/220V	
Motor Starting	1555	1455	1326	
Capability* kVA	1000	1 100	1020	
Short Circuit	300	300	300	
Capacity** %	300	300	300	
Reactances: Per Unit				
Xd	2.850	3.070	3.400	
X'd	0.150	0.160	0.180	
X"d	0.103	0.111	0.123	

Reactances shown are applicable to prime ratings.

\*Based on 30% voltage dip at 0.6 power factor.

\*\*With optional permanent magnet generator or SHUNT excitation.

Output Ratings Technical Data 50 Hz								
Voltage	Pri	me:	Standby:					
	kVA	kW	kVA	kW				
415/240V	500.0	400.0	550.0	440.0				
400/230V	500.0	400.0	550.0	440.0				
380/220V	500.0	400.0	550.0	440.0				

Output Ratings Technical Data 60 Hz								
Voltage	Pr	ime:	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. Warranty All prime equipment carries a one year manufacturer's warranty. Standby equipment, limited to 500 running hours per year, has a 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.

**General Information**