

# P550-1

Output Ratings		
Voltage, Frequency	Prime	Standby
400V, 50 Hz	500.0 kVA / 400.0 kW	550.0 kVA / 440.0 kW
	- / -	- / -

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.

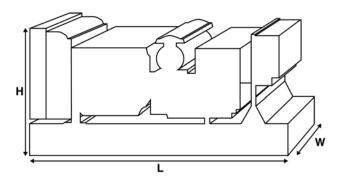




Image for illustration purposes only.

Ratings and Performance Data		
Engine Make & Model:	Perkins® 2506A-E15	TAG2
Alternator manufactured for FG Wilson by:	Leroy Somer	
Alternator Model:	LL6114F	
Control Panel:	PowerWizard 1.1+	
Base Frame:	Heavy Duty Fabricate	ed Steel
Circuit Breaker Type:	3 Pole MCCB	
Frequency:	50 Hz	60 Hz
Engine Speed: RPM	1500	-
Fuel Tank Capacity: litres (US gal)	888 (234.6	5)
Fuel Consumption: I/hr (US gal/hr)		
(100% Load) - Prin	ne 98.5 (26.0)	-
- Stand	by 108.6 (28.7)	-

### **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 and 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)
3800 (149.6)	1131 (44.5)	2215 (87.2)	3800 (8378)	3858 (8505)
Dry = With Lube Oil Wet = Wit			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 / Alignme	nt: 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 m <sup>2</sup> (lb/	/in <sup>2</sup> ) 4.29 (14660)		
Engine Electrical System:			
- Voltage / Gr	round 24/Negative		
- Battery Charger A	Amps 70		
Weight: kg (Ib)	- Dry 1633 (3600)		
	- Wet 1714 (3779)		

Air Systems	50 Hz	60 Hz
Air Filter Type:	Non Ca	nister
Combustion Air Flow: m <sup>3</sup> /min (cfm)		
- Prime	35.8 (1264)	-
- Standby	36.6 (1293)	-
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: 1 (US	gal)	58.1 (15.3)	-
Water Pump Type:		Centrifu	ıgal
Heat Rejected to Water & Lui	oe Oil:		
kW (Btu/min)	- Prime	147.0 (8360)	-
	- Standby	165.0 (9383)	-
Heat Radiation to Room: Heat radiated from engine and alternator			
kW (Btu/min)	- Prime	54.3 (3088)	
	- Standby	61.7 (3509)	
Radiator Fan Load: kW (hp)		13.7 (18.4)	-
Radiator Cooling Airflow: m³/n	nin (cfm)	476.4 (16824)	-
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:	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
<b>Maximum Allowable Back Pressure:</b> <sup>kPa</sup> (in Hg)	6.8 (2.0)	_
Exhaust Gas Flow: m <sup>3</sup> /min (cfm)		
- Prime	94.0 (3320)	-
- Standby	98.0 (3461)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	500 (932)	-
- Standby	550 (1022)	-

Performance		50 Hz	60 Hz
Engine Speed: rpm		1500	-
Gross Engine Powe	er: kW (hp)		
	- Prime	451.0 (605.0)	-
	- Standby	495.0 (664.0)	-
BMEP: kPa (psi)			
	- Prime	2405.0 (346.0)	-
	- Standby	2640.0 (379.8)	-

uel Syste	m			
uel Filter	Туре:	R	eplaceable Eler	ment
lecomme	nded Fuel:	C	lass A2 Diesel	
uel Cons	umption: I/hr (US g	al/hr)		
	110%	100%	75%	50%
Prime	Load	Load	Load	Load
50 Hz	108.6 (28.7)	98.5 (26.0)	75.2 (19.9)	54.0 (14.3)
60 Hz	-	-	-	-
		100%	75%	50%
Standb	у	Load	Load	Load
50 Hz		108.6 (28.7)	82.0 (21.7)	58.1 (15.3)
60 Hz		-	-	-

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

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

Alternator Operating Data	
Overspeed: rpm	2250
Voltage Reguation: (Steady state)	+/- 0.5%
Wave Form NEMA = TIF:	50
Wave Form IEC = THF:	2.0%
Total Harmonic content LL/LN:	4.0%
Radio Interference:	Suppression is in line with European Standard EN61000-6
Radiant Heat: kW (Btu/min)	
- 50 Hz	26.7 (1518)
- 60 Hz	-

Alternator Performance Data:		50 Hz			60 Hz
Data Item	415/240V	400/230V	380/220V		
Motor Starting					
Capability* kVA	1296	1213	1106		
Short Circuit	200	200	200		
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 AREP excitation.

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			
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							

#### Documentation

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

#### **G**enerating 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.

#### 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.