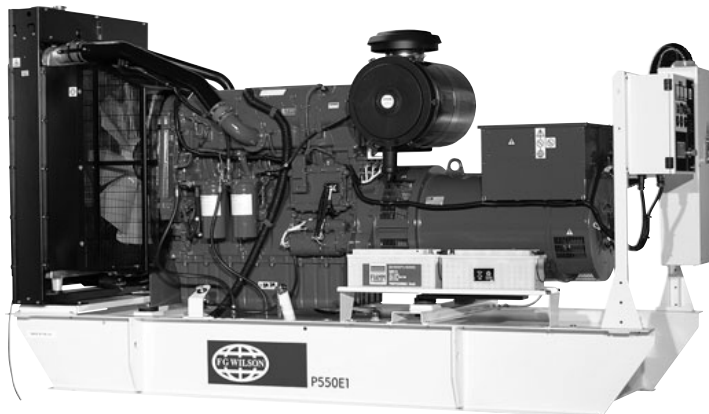


# P500P1/P550E1



Output Ratings		
Generating Set Model	P500P1	P550E1
	Prime*	Standby*
380-415V, 50 Hz	500 kVA 400 kW	550 kVA 440 kW

\* Refer to ratings definitions on page 4.  
Ratings at 0.8 pf

Technical Data	
Engine Make & Model	Perkins 2806C-E16TAG2
Alternator Model	LL6014H
Base Frame Type	Heavy Duty Fabricated Steel
Circuit Breaker Type/Rating	3 Pole MCCB
Frequency	<b>50 Hz</b>
Engine Speed	1500
Fuel Tank Capacity: Litres (US Gal)	863 (228)
Fuel Consump, P500P1: L/hr (US Gal/hr)	106.1 (28.0)
Fuel Consump, P550E1: L/hr (US Gal/hr)	113.9 (30.1)



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## Alternator Performance Data

Data Item	50 Hz		
	415/240	400/230	380/220
<b>Motor Starting Capability* kVA</b>	1258	1175	1067
<b>Short Circuit Capacity**%</b>	300	300	300
<b>Reactances: Per Unit</b>			
<b>X<sub>d</sub></b>	2.90	3.13	3.46
<b>X'<sub>d</sub></b>	0.12	0.13	0.15
<b>X''<sub>d</sub></b>	0.099	0.106	0.118

Reactances shown are applicable to prime ratings

\* Based on 30% voltage dip. Improved motor starting capability is available with optional Permanent Magnet generator or AREP excitation

\*\* With optional Permanent Magnet generator or AREP excitation.

## Alternator Technical Data

Physical Data		Operating Data	
<b>Manufacturer:</b>	FG Wilson	<b>Overspeed: RPM</b>	2250
<b>Model:</b>	LL6014H	<b>Voltage Regulation (steady state)</b>	±0.5%
<b>No. of Bearings:</b>	Single	<b>Wave Form NEMA = TIF</b>	<50
<b>Insulation Class:</b>	H	<b>Wave Form IEC = THF</b>	<2%
<b>Winding Pitch (Code):</b>	2/3 (No. 6S)	<b>Total Harmonic Content LL/LN</b>	<4%
<b>Wires:</b>	6	<b>Radio Interference</b>	Suppression is in line with British Standard BSEN50081 & BSEN50082
<b>Ingress Protection Rating:</b>	IP23	<b>Radiant Heat: kW (Btu/min)</b>	
<b>Excitation System:</b>	Shunt	-50 Hz:	23.7 (1348)
<b>AVR Model:</b>	R448		

## Technical Data

### 3 Phase Ratings and Performance at 50 Hz, 1500 RPM

Voltage	Model: P500P1 Prime		Model: P550E1 Standby	
	kVA	kW	kVA	kW
415/240	500	400	550	440
400/230	500	400	550	440
380/220	500	400	550	440

## Definitions

### Standby Rating

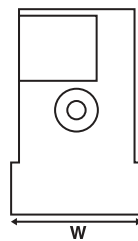
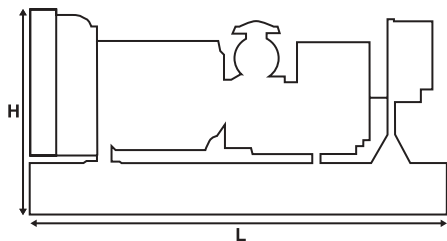
These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The alternator on this model is peak continuous rated (as defined in ISO8528-3).

### 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.

### Standard Reference Conditions

Note: Standard reference conditions 27°C (80°F) Air Inlet Temp, 152.4m (500ft) A.S.L. 60% relative humidity. All engine performance data based on the above mentioned maximum continuous ratings. Fuel consumption data at full load with diesel fuel with specific gravity of 0.85 and conforming to BS2869: 1998, Class A2.



## Weights & Dimensions

Weights: kg (lbs)		Dimensions: mm (in)	
Net (+ lube oil)	3760 (8289)	Length	3828 (150.7)
Wet (+ lube oil & coolant)	3810 (8400)	Width	1200 (47.2)
Fuel, lube oil & coolant	4543 (9994)	Height	2174 (85.6)

## General Data

### Documents

A full set of operation and maintenance manuals, circuit wiring diagrams, and commissioning/fault finding instruction leaflets.

### Generating Set Standards

The equipment meets the following standards: BS5000, ISO 8528, ISO 3406, IEC 60034, VDE 0530, NEMA MG-1.22.

FG Wilson is a fully accredited ISO9001 company.

### Warranty

All equipment carries full manufacturer's warranty. Extended warranty terms available. For details on warranty cover please contact your local dealer, or visit our website, [www.FGWilson.com](http://www.FGWilson.com)