

P500P2/P550E2



Ratings at 0.8 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.

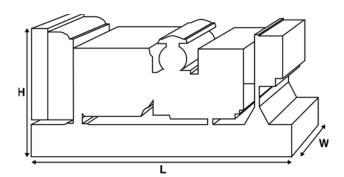




Image for illustration purposes only.

Ratings and Performance Data		
Engine Make & Model:	Perkins 2506C-E	15TAG2
Alternator manufactured for FG Wilson by:	Leroy Somer	
Alternator Model:	LL6114F	
Control Panel:	PowerWizard 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)	928 (2	245.2)
Fuel Consumption: I/hr (US gal/hr)		
(100% Load) - P r	me 102.4 (27.1)	-
- Star	dby 111.8 (29.5)	-

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 an	nd Weights			
Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	Dry kg (lb)	Wet kg (lb)
3700 (145.7)	1100 (43.3)	2143 (84.4)	3920 (8642)	3958 (8726)
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. Generating set pictured may include optional accessories.

Engine Technical Data		
No. of Cylinders / Alignment:		6 / In Line
Cycle:		4 Stroke
Bore / Stroke: mm (in)		135.0 (5.3)/167.0 (6.6)
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	1:	
- Voltage /	Ground	24/Negative
- Battery Charge	er Amps	70
Weight: kg (lb)	- Dry	1633 (3600)
	- Wet	1714 (3779)

Performance		50 Hz	60 Hz
Engine Speed: rpm		1500	-
Gross Engine Powe	er: kW (hp)		
	- Prime	443.0 (594.0)	-
	- Standby	487.0 (653.0)	-
BMEP: kPa (psi)			
	- Prime	2471.0 (358.4)	-
	- Standby	2717.0 (394.0)	-

Fuel System

Fuel Filter Type:Replaceable ElementRecommended Fuel:Class A2 Diesel

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

	110%	100%	75%	50%
Prime	Load	Load	Load	Load
50 Hz	111.8 (29.5)	102.4 (27.1)	78.4 (20.7)	53.4 (14.1)
60 Hz	-	-	-	-

	110%	100%	75%	50%
Standby	Load	Load	Load	Load
50 Hz		111.8 (29.5)	85.7 (22.6)	58.4 (15.4)
60 Hz		-	-	-

(Based on diesel fuel with a specific gravity of 0.84 and conforming to BS2869, Class A2) $\,$

	50 Hz	60 Hz
Air Filter Type:		nent 18"
m)		
- Prime	30.5 (1077)	-
- Standby	32.0 (1130)	-
	6.2 (24.9)	-
	- Prime	Paper Elem - Prime 30.5 (1077) - Standby 32.0 (1130)

Cooling System	50 Hz	60 Hz
Cooling System Capacity: I (US gal)	38.3 (10.1)	-
Water Pump Type:	Centrif	ugal
Heat Rejected to Water & Lube Oil:		
kW (Btu/min) - Prime	157.0 (8928)	-
- Standby	179.0 (10180)	-
Heat Radiation to Room: Heat radiated from	engine and alternator	
kW (Btu/min) - Prime	63.0 (3583)	-
- Standby	71.0 (4038)	-
Radiator Fan Load: kW (hp)	16.0 (21.5)	-
Radiator Cooling Airflow: m³/min (cfm)	660.0 (23308)	-
External Restriction to Cooling Airflow: Pa (in H ₂ O)	125 (0.5)	-

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

Cooling system 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.

Exhaust System	50 Hz	60 Hz
Silencer Type:	Indust	rial
Silencer Model & Quantity:	SD150	(1)
Pressure Drop Across Silencer System: kPa (in Hg)	0.28 (0.083)	-
Silencer Noise Reduction Level: dB	15	-
Maximum Allowable Back Pressure: kPa (in Hg)	6.8 (2.0)	-
Exhaust Gas Flow: m³/min (cfm)		
- Prime	81.0 (2860)	-
- Standby	87.0 (3072)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	514 (957)	-
- Standby	528 (982)	-

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:	R450M

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:	2.0%
Radio Interference:	Suppression is in line with European Standard EN61000-6
Radiant Heat: kW (Btu/min)	
- 50 Hz	27.1 (1541)
- 60 Hz	-

Alternator Performance Data:	50 Hz			
Data Item	415/240V	400/230V 230/115V 200/115V	380/220V 220/110V	220/127V
Motor Starting Capability* kVA	1296	1213	1106	1438
Short Circuit Capacity** %	300	300	300	300
Reactances: Per Unit				
Xd	2.850	3.070	3.400	2.330
X'd	0.150	0.160	0.180	0.120
X"d	0.103	0.111	0.123	0.084

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.

Voltage Technical Data 50 Hz							
Voltage	Pri	ne:	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			
230/115V	500.0	400.0	550.0	440.0			
220/127V	460.0	368.0	506.0	404.8			
220/110V	500.0	400.0	550.0	440.0			
200/115V	500.0	400.0	550.0	440.0			

Voltage Technical Data 60 Hz						
Voltage	Pri	ime:	Standby:			
	kVA	kW	kVA	kW		

Documentation
A full set of operation and maintenance manuals and circuit wiring diagrams.
Generating 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 II 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:

General Information