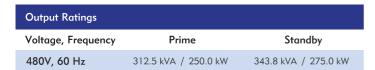


# www.FGWilson.com

# P344-3



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.

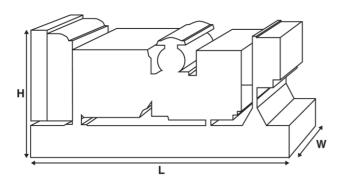




Image for illustration purposes only.

Ratings and Performance Data			
Engine Make & Model:	Perkins® 1506A-E88TAG4		
Alternator manufactured for FG Wilson by:	Leroy Somer		
Alternator Model:	LL5014J		
Control Panel:	PowerWizard 1.1+		
Base Frame:	Heavy Duty Fabricated Steel		
Circuit Breaker Type:	3 Pole MCCB		
Frequency:	60 Hz		
Engine Speed: rpm	1800		
Fuel Tank Capacity: litres (US gal)	587 (155.1)		
Fuel Consumption: I/hr (US gal/hr)			
(100% Load)	- <b>Prime</b> 66.2 (17.5)		
	- <b>Standby</b> 72.3 (19.1)		

# **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 ar	d 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)
3300 (129.9)	1100 (43.3)	1771 (69.7)	2390 (5269)	2426 (5348)
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.

Engine Technical Data		
No. of Cylinders / Alignment:	6 / In Line	
Cycle:	4 Stroke	
Bore / Stroke: mm (in)	112.0 (4.4)/149.0 (5.9)	
Induction:	Turbocharged Air To Air Charge Cooled	
Cooling Method:	Water	
Governing Type:	Electronic	
Governing Class:	ISO 8528 G2	
Compression Ratio:	16.1:1	
Displacement: I (cu. in)	8.8 (537.0)	
Moment of Inertia: kg m² (lb/in²)	2.40 (8212)	
Engine Electrical System:		
- Voltage / Ground	24/Negative	
- Battery Charger Amps	45	
Weight: kg (lb) - Dry	778 (1715)	
- Wet	800 (1764)	

Performance	60 Hz
Engine Speed: rpm	1800
Gross Engine Power: kW (hp)	
- Pri	ime 292.0 (392.0)
- Stan	dby 320.0 (429.0)
BMEP: kPa (psi)	
- Pri	me 2210.0 (320.6)
- Stan	dby 2422.0 (351.3)

Fuel Filt	er Type:	Replaceable Element			
Recomm	nended Fuel:	Class A2 Diesel or BSEN590			
Fuel Cor	nsumption: I/hr (US	gal/hr)			
	110%	100%	75%	50%	
Prim	e Load	Load	Load	Load	
60 H	z 72.1 (19.0)	66.2 (17.5)	50.6 (13.4)	36.8 (9.7)	
		100%	75%	50%	
Stan	dby	Load Load Load			

Fuel System

60 Hz

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

72.3 (19.1) 55.1 (14.6) 39.6 (10.5)

Air Systems	60 Hz
Air Filter Type:	Paper Element
Combustion Air Flow: m³/min (cfm)	
- Prir	ne 20.8 (735)
- Stand	<b>by</b> 21.2 (749)
Max. Combustion Air Intake Restriction: $kPa$ (in $H_2O$ )	6.2 (24.9)

Cooling System		60 Hz	
Cooling System Capacity: I (US gal)		36.0 (;)	
Water Pump Type:		Centrifugal	
Heat Rejected to Water & Lube Oil:			
kW (Btu/min)	- Prime	121.0 (6881)	
	- Standby	126.0 (7165)	
Heat Radiation to Room: H	eat radiated from engin	e and alternator	
kW (Btu/min)	- Prime	31.2 (1774)	
	- Standby	34.9 (1985)	
Radiator Fan Load: kW (hp)		13.2 (17.7)	
Radiator Cooling Airflow: m³/min (cfm)		9.2 (325)	
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:	Spin-On, Full Flow
Total Oil Capacity: I (US gal)	39.0 (10.3)
Oil Pan: I (US gal)	36.0 (9.5)
Oil Type:	API CI-4 0W-30
Oil Cooling Method:	Water

Exhaust System	60 Hz
Maximum Allowable Back Pressure: kPa (in Hg)	10.0 (3.0)
Exhaust Gas Flow: m³/min (cfm)	
- Prime	48.8 (1723)
- Standby	52.5 (1854)
Exhaust Gas Temperature: °C (°F)	
- Prime	478 (892)
- Standby	498 (928)

Alternator Physical Data	
Manufactured for FG Wilson by:	Leroy Somer
Model:	LL5014J
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 Regulation: (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)	
- 60 Hz	20.9 (1189)

Alternator Performance Data:		60 Hz	
Data Item	480/277V 240/139V	380/220V	440/254V 220/127V
	210/1077		220,1271
Motor Starting	683	457	589
Capability* kVA	005	437	307
Short Circuit	300	300	300
Capacity** %	000	000	000
Reactances: Per Unit			
Xd	2.743	4.201	3.264
X'd	0.125	0.192	0.149
X"d	0.075	0.115	0.089

Reactances	shown	are	applicable	to	prime	ratinas.

<sup>\*</sup>Based on 30% voltage dip at 0.6 power factor and SHUNT excitation.
\*\*With optional permanent magnet generator or AREP excitation.

Output Ratings Technical Data 60 Hz								
Voltage	Pri	me:	Standby:					
	kVA	kW	kVA	kW				
480/277V	312.5	250.0	343.8	275.0				
220/127V	312.5	250.0	343.8	275.0				
380/220V	300.0	240.0	330.0	264.0				
440/254V	312.5	250.0	343.8	275.0				
240/139V	312.5	250.0	343.8	275.0				

## **General Information**

## **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.

#### 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:



2nd floor, The Gallery Building

80 E. Rodriguez Jr. Ave., Brgy. Ugong Norte, Quezon City

Trunk line: (632) 8631-1336 to 37 Email: info@castle-power.com Website: www.castle-power.com

# **Account Managers:**

Marvin Alcantara - +632 917- 826 7296 Rhusell De Vera - +632 917-886-4166

# 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.