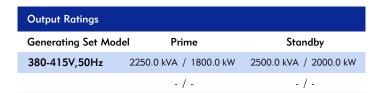


www.FGWilson.com

# P2500-1



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 0.86 and conforming to BSEN590/BS2869: 1998, Class A2.

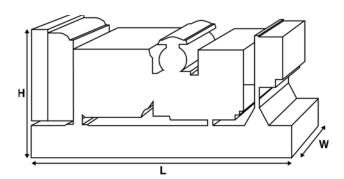




Image for illustration purposes only.

Perkins 4016-61	TRG3
Leroy Somer	
LL9224P	
PowerWizard 1.1	+
Heavy Duty Fabri	cated Steel
3 Pole ACB	
50 Hz	60 Hz
1500	-
-	
me 470.0 (124.2)	-
dby 527.0 (139.2)	-
	LL9224P PowerWizard 1.1 Heavy Duty Fabri 3 Pole ACB 50 Hz 1500

#### **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 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 and Weights				
Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	<b>Dry</b> kg (lb)	<b>Wet</b> kg (lb)
5972 (235.1)	2180 (85.8)	3402 (133.9)	14052 (30982)	14488 (31941)
Dry = With Lube	Oil	Wet = With Lub	e 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.

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Northern Ireland • Brazil • China • India • USA

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Engine Technical Data		
No. of Cylinders / Aligni	ment:	16 / Vee
Cycle:		4 Stroke
Bore / Stroke: mm (in)		160.0 (6.3)/190.0 (7.5)
Induction:		Turbocharged Air To Water Charge Cooled
Cooling Method:		Water
Governing Type:		Electronic
Governing Class:		ISO 8528 G2
Compression Ratio:		13.0:1
Displacement: I (cu. in)		61.1 (3730.0)
Moment of Inertia: kg m² (lb/in²)		20.72 (70803)
Engine Electrical System	n:	
- Voltage /	Ground	24/Negative
- Battery Charge	er Amps	40
Weight: kg (lb)	- Dry	5570 (12280)
	- Wet	5847 (12890)

Performance	50 Hz	60 Hz
Engine Speed: rpm	1500	-
Gross Engine Power: kW (hp)		
- Pri	me 1975.0 (2648.5)	-
- Stand	dby 2183.0 (2927.4)	-
BMEP: kPa (psi)		
- Pri	me 2584.8 (374.9)	-
- Stand	dby 2857.2 (414.4)	-

## 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	527.0 (139.2)	470.0 (124.2)	351.0 (92.7)	245.0 (64.7)
60 Hz	-	-	-	-

	110%	100%	75%	50%
Standby	Load	Load	Load	Load
50 Hz		527.0 (139.2)	389.0 (102.8)	267.0 (70.5)
60 Hz		-	-	-

(Based on diesel fuel with a specific gravity of 0.85 and conforming to BSEN590/BS2869, Class A2)  $\,$ 

Air Systems		50 Hz	60 Hz
Air Filter Type:		Replaceable	Element
Combustion Air Flow: m³/min (o	cfm)		
	- Prime	160.0 (5650)	-
	- Standby	175.0 (6180)	-
Max. Combustion Air Intate Restriction: $kPa$ (in $H_2O$ )		3.7 (14.9)	-

Cooling System	50 Hz	60 Hz
Cooling System Capacity: I (US gal)	436.0 (115.2)	-
Water Pump Type:	Centrifu	ugal
Heat Rejected to Water & Lube O	il:	
kW (Btu/min)	Prime 757.0 (43050)	-
- Sto	andby 830.0 (47201)	-
Heat Radiation to Room: Heat radiate	ed from engine and alternator	
kW (Btu/min)	Prime 206.1 (11721)	
- Sto	andby 236.0 (13421)	
Radiator Fan Load: kW (hp)	85.7 (114.9)	-
Radiator Cooling Airflow: m³/min (cf	m) 2625.6 (92722)	-
External Restriction to Cooling Airflow: Pa (in H <sub>2</sub> O)	250 (1.0)	-

Lubrication System	
Oil Filter Type:	Spin-On, Full Flow
Total Oil Capacity: I (US gal)	238.0 (62.9)
Oil Pan: I (US gal)	213.0 (56.3)
Oil Type:	API CG 15W-40 CH4
Oil Cooling Method:	Water

Exhaust System	50 Hz	60 Hz
Silencer Type:	Indust	rial
Silencer Model & Quantity:	IND-Option	on (1)
Pressure Drop Across Silencer System: kPa (in Hg)	1.37 (0.405)	-
Silencer Noise Reduction Level: dB	15.6	-
	4.0 (1.2)	-
Exhaust Gas Flow: m³/min (cfm)		
- Prim	e 477.0 (16845)	-
- Standb	y 525.0 (18540)	-
Exhaust Gas Temperature: °C (°F)		
- Prim	e 475 (887)	-

- Standby 560 (1040)

Alternator Physical Data	
Manufactured for FG Wilson by:	Leroy Somer
Model:	LL9224P
No. of Bearings:	1
Insulation Class:	Н
Winding Pitch Code:	2/3 - 6\$
Wires:	6
Ingress Protection Rating:	IP23
Excitation System:	AREP
AVR Model:	D510

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:	3.5%
Radio Interference:	Suppression is in line with European Standard EN61000-6
Radiant Heat: kW (Btu/min)	
- 50 Hz	76.0 (4322)
- 60 Hz	-

Alternator Performance Data:	50 Hz			60 Hz	
Data Item	415/240V	400/230V	380/220V		
Motor Starting Capability* kVA	8873	8269	7493		
Short Circuit Capacity** %	300	300	300		
Reactances: Per Unit					
Xd	2.540	2.734	3.029		
X'd	0.190	0.200	0.230		
X"d	0.099	0.106	0.118		

Reactances shown are applicable to prime ratings.

\*Based on 30% voltage dip at 0.4 power factor.

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

Voltage Technical Data 50 Hz						
Voltage	Pri	me:	Standby:			
	kVA	kW	kVA	kW		
415/240V	2250.0	1800.0	2500.0	2000.0		
400/230V	2250.0	1800.0	2500.0	2000.0		
380/220V	2250.0	1800.0	2500.0	2000.0		

Voltage 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.
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.
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:

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