



Image for illustration purposes only.

# P1825/P2000E

## Output Ratings

Generating Set Model	Prime*	Standby*
380-415V,50Hz	1825.1 kVA / 1460.1 kW	2000.0 kVA / 1600.0 kW
	- / -	- / -

Ratings at 0.8 power factor.

### Prime Rating

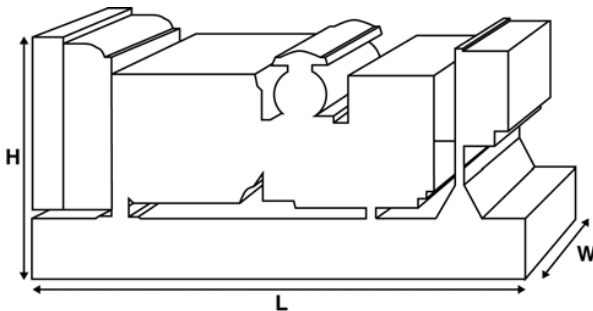
These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

### 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.



## Ratings and Performance Data

Engine Make & Model:	Perkins 4016TAG1A	
Alternator manufactured for FG Wilson by:	Leroy Somer	
Alternator Model:	LL9124H	
Control Panel:	PowerWizard 1.1+	
Base Frame:	Heavy Duty Fabricated Steel	
Circuit Breaker Type:	3 Pole ACB	
Frequency:	50 Hz	60 Hz
Engine Speed: RPM	1500	-
Fuel Tank Capacity: litres (US gal)	-	
Fuel Consumption: l/hr (US gal/hr)		
(100% Load)	- Prime 378.3 (99.9)	-
	- Standby 419.6 (110.8)	-

## 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](http://www.FGWilson.com)

## Dimensions and Weights

Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	Dry kg (lb)	Wet kg (lb)
5749 (226.3)	2300 (90.6)	3020 (118.9)	15495 (34161)	15695 (34602)
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.

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### Engine Technical Data

No. of Cylinders / Alignment:	16 / Vee	
Cycle:	4 Stroke	
Bore / Stroke: mm (in)	160.0 (6.3)/190.0 (7.5)	
Induction:	Turbocharged Air To Air Charge Cooled	
Cooling Method:	Water	
Governing Type:	Electronic	
Governing Class:	ISO 8528 G2	
Compression Ratio:	13.6:1	
Displacement: l (cu. in)	61.1 (3730.0)	
Moment of Inertia: kg m <sup>2</sup> (lb/in <sup>2</sup> )	20.72 (70803)	
Engine Electrical System:		
- Voltage / Ground	24/Negative	
- Battery Charger 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)		
- Prime	1588.0 (2130.0)	-
- Standby	1741.0 (2335.0)	-
BMEP: kPa (psi)		
- Prime	2079.0 (301.5)	-
- Standby	2279.0 (330.5)	-

### Fuel System

Fuel Filter Type:	Replaceable Element
Recommended Fuel:	Class A2 Diesel

### Fuel Consumption: l/hr (US gal/hr)

	110%	100%	75%	50%
Prime	Load	Load	Load	Load
50 Hz	419.6 (110.8)	378.3 (99.9)	279.3 (73.8)	190.2 (50.2)
60 Hz	-	-	-	-

	110%	100%	75%	50%
Standby	Load	Load	Load	Load
50 Hz	419.6 (110.8)	306.9 (81.1)	206.4 (54.5)	-
60 Hz	-	-	-	-

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

### Air Systems

	50 Hz	60 Hz
Air Filter Type:	Replaceable Element	
Combustion Air Flow: m <sup>3</sup> /min (cfm)		
- Prime	132.0 (4662)	-
- Standby	140.0 (4944)	-
Max. Combustion Air Intake Restriction: kPa (in H <sub>2</sub> O)	3.7 (14.9)	-

### Cooling System

	50 Hz	60 Hz
Cooling System Capacity: l (US gal)	355.0 (93.8)	-
Water Pump Type:	Centrifugal	
Heat Rejected to Water & Lube Oil:		
kW (Btu/min)	- Prime 586.0 (33325)	-
	- Standby 629.0 (35771)	-
Heat Radiation to Room: Heat radiated from engine and alternator		
kW (Btu/min)	- Prime 163.8 (9315)	-
	- Standby 177.0 (10066)	-
Radiator Fan Load: kW (hp)	63.5 (85.2)	-
Radiator Cooling Airflow: m <sup>3</sup> /min (cfm)	2058.0 (72678)	-
External Restriction to Cooling Airflow: Pa (in H <sub>2</sub> O)	250 (1.0)	-

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:	Spin-On, Full Flow
Total Oil Capacity: l (US gal)	238.0 (62.9)
Oil Pan: l (US gal)	214.0 (56.5)
Oil Type:	API CG4 15W-40
Oil Cooling Method:	Water

### Exhaust System

	50 Hz	60 Hz
Silencer Type:	Optional	
Silencer Model & Quantity:	- (-)	
Pressure Drop Across Silencer System: kPa (in Hg)	-	-
Silencer Noise Reduction Level: dB	17	-
Maximum Allowable Back Pressure: kPa (in Hg)	9.3 (2.7)	-
Exhaust Gas Flow: m <sup>3</sup> /min (cfm)		
- Prime	343.0 (12113)	-
- Standby	343.0 (12113)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	439 (822)	-
- Standby	439 (822)	-



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Alternator Physical Data	
Manufactured for FG Wilson by:	Leroy Somer
Model:	LL9124H
No. of Bearings:	1
Insulation Class:	H
Winding Pitch Code:	2/3 - 6S
Wires:	6
Ingress Protection Rating:	IP23
Excitation System:	AREP
AVR Model:	R449

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:	2.5%
Radio Interference:	Suppression is in line with European Standard EN61000-6
Radiant Heat: kW (Btu/min)	
- 50 Hz	70.1 (3987)
- 60 Hz	-

Alternator Performance Data:	50 Hz			60 Hz	
	415/240V	400/230V	380/220V		
Data Item					
Motor Starting Capability* kVA	6986	6509	5897		
Short Circuit Capacity** %	300	300	300		
Reactances: Per Unit					
Xd	2.950	3.170	3.510		
X'd	0.220	0.240	0.260		
X''d	0.115	0.124	0.138		

Reactances shown are applicable to prime ratings.  
 \*Based on 30% voltage dip at 0.4 power factor.  
 \*\*With optional permanent magnet generator.

Voltage Technical Data 50 Hz				
Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW
415/240V	1825.1	1460.1	2000.0	1600.0
400/230V	1825.1	1460.1	2000.0	1600.0
380/220V	1825.1	1460.1	2000.0	1600.0

Voltage Technical Data 60 Hz				
Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW



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**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.



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