



P2500-1P

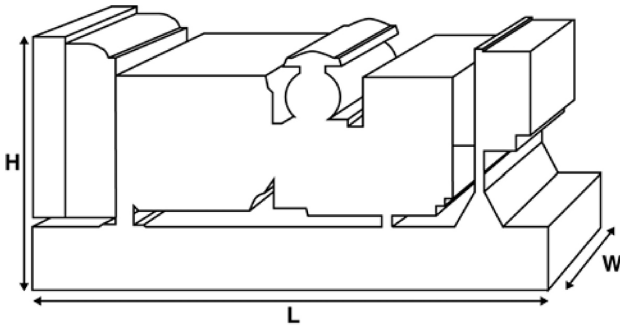
Output Ratings

Voltage, Frequency Prime

400/230V, 50 Hz	kVA	2500	
	kW	2000	

Ratings at 0.8 power factor.

Please refer to the output ratings technical data section for specific generator set outputs per voltage.



Dimensions and Weights

Length	mm	6038
Width	mm	2180
Height	mm	2900
Weight (Dry)	kg	13478
Weight (Wet)	kg	13878

Ratings in accordance with ISO 8528, ISO 3046, IEC 60034, BS5000 and NEMA MG-1.22.
Generator set pictured may include optional accessories.

Prime Rating

These ratings are applicable for supplying continuous electrical power (at variable load as defined in ISO 8528-1) in lieu of commercially purchased power. There is no limitation to the annual hours of operation

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.

FG Wilson offer a range of optional features to allow you to tailor our generator sets to meet your power needs.

Options available 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

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Ratings and Performance Data

Engine Make		Perkins	
Engine Model:		4016-61TRG3X	
Alternator Make		Leroy Somer	
Alternator Model:		LL9324R	
Control Panel:		DSE7410	
Base Frame:		Heavy Duty Fabricated Steel	
Circuit Breaker Type:		3 Pole ACB-Option	
Frequency:		50 HZ	
Engine Speed: RPM	rpm	1500	
Fuel Tank Capacity:	litres (US gal)	N/A (N/A)	
Fuel Consumption Prime	litres (US gal)	528.4 (139.6)	
Fuel Consumption Standby	litres (US gal)		

Engine Technical Data

No. of Cylinders		16
Alignment		60deg Vee
Cycle		4 STROKE
Bore	mm (in)	160 (6.3)
Stroke	mm (in)	190 (7.5)
Induction		TURBOCHARGED AIR TO WATER CHARGE COOLED
Cooling Method		WATER
Governing Type		ELECTRONIC
Governing Class		ISO 8528
Compression Ratio		13.0:1
Displacement	L (cu. in)	61.1 (3730)
Moment of Inertia:	kg m² (lb/in²)	20.72 (70803)
Voltage		24
Ground		Negative
Battery Charger Amps		55
Engine Weight Dry	kg (lb)	5570 (12280)
Engine Weight Wet	kg (lb)	5847 (12890)

Engine Performance Data

50 Hz

Engine Speed	rpm	1500	
Gross Engine Power Prime	kW (hp)	2183 (2927.4)	
Gross Engine Power Standby	kW (hp)		
BMEP Prime	kPa (psi)	2857.2 (414.4)	
BMEP Standby	kPa (psi)		

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Fuel System

Fuel Filter Type:	Replaceable Element				
Recommended Fuel:			Class A2 Diesel		
Fuel Consumption at			100 % Load	75 % Load	50 % Load
50 Hz Prime:	l/hr (US gal/hr)		528.4 (139.6)	389.2 (102.8)	266.9 (70.5)
50 Hz Standby	l/hr (US gal/hr)	-			

(Based on diesel fuel with a specific gravity of 0.86 and conforming to BS2869 classA2,EN590)

Air System

50 Hz

Air Filter Type:	Replaceable Element				
Combustion Air Flow Prime	m ³ /min (cfm)		175 (6180)		
Combustion Air Flow Standby	m ³ /min (cfm)				
Max. Combustion Air Intake Restriction	kPa		3.7 (14.9)		

Cooling System

50 Hz

Cooling System Capacity	l (US gal)	400 (105.7)		
Water Pump Type:		Centrifugal		
Heat Rejected to Water & Lube Oil: Prime	kW (Btu/min)	830 (47201)		
Heat Rejected to Water & Lube Oil: Standby	kW (Btu/min)			
Heat Radiation to Room*: Prime	kW (Btu/min)	236.8 (13467)		
Heat Radiation to Room*: Standby	kW (Btu/min)			
Radiator Fan Load:	kW (hp)	77 (103.3)		
Radiator Cooling Airflow:	m ³ /min (cfm)	2184 (77127)		
External Restriction to Cooling Airflow:	Pa (in H ₂ O)	250 (1)		

*: Heat radiated from engine and alternator
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 (62.9)		
Oil Pan Capacity:	l (US gal)		213 (56.3)		
Oil Type:			API CG 15W-40 CH4		
Oil Cooling Method:	WATER				

Exhaust System

50 Hz

Maximum Allowable Back Pressure:	kPa (in Hg)	4 (1.2)		
Exhaust Gas Flow: Prime	m ³ /min (cfm)	525 (18540)		
Exhaust Gas Flow: Standby	m ³ /min (cfm)			
Exhaust Gas Temperature: Prime	°C (°F)	560 (1040)		
Exhaust Gas Temperature: Standby	°C (°F)			

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Alternator Physical Data

No. of Bearings:	1
Insulation Class:	H
Winding Pitch:	2/3
Winding Code	6S
Wires:	6
Ingress Protection Rating:	IP23
Excitation System:	AREP
AVR Model:	D510

Alternator Operating Data

Overspeed: rpm		2250
Voltage Regulation: (Steady state)		+/- 0.5
Wave Form NEMA = TIF:		50
Wave Form IEC = THF:		2
Total Harmonic content LL/LN:		3.5
Radio Interference:		EN61000-6
Radiant Heat: 50 Hz	kW (Btu/min)	79 (4493)

Alternator Performance Data 50 Hz:

		415/240 V	400/230 V	380/220 V	
Voltage Code					
Motor Starting Capability*	kVA	4583	4264	3856	
Short Circuit Capacity	%	300	300	300	
Reactances	Xd	2.848	3.057	3.396	
	X'd	0.219	0.239	0.259	
	X''d	0.107	0.115	0.128	



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Output Ratings 50 Hz

Prime		
Voltage Code	kVA	kW
415/240V	2500	2000
400/230V	2500	2000
380/220V	2500	2000
230/115V		
220/127V		
220/110V		
200/115V		
240V		
230V		
220V		



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Dealer Contact Details

Documentation

Operation and maintenance manual including circuit wiring diagrams.

Generator Set Standards

The equipment meets the following standards: BS5000, ISO 8528, ISO 3046, IEC 60034, NEMA MG-1.22.

Caterpillar (NI) Limited is the manufacturer of FG Wilson brand diesel generating sets, and our facilities manufacture products in the following locations:

Brazil • China • India

With headquarters in Northern Ireland, FG Wilson products are distributed through a Global Dealer Network.

To contact your local Sales Office, please visit the FG Wilson website at www.fgwilson.com.

In line with our policy of continuous product development, we reserve the right to change specification without notice.