

P40-4S

Output Ratings		
Voltage, Frequency	Prime	Standby
230V, 50 Hz	36.0 kVA / 36.0 kW	40.0 kVA / 40.0 kW
240V, 60 Hz	- / -	- / -

Ratings at 1.0 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.

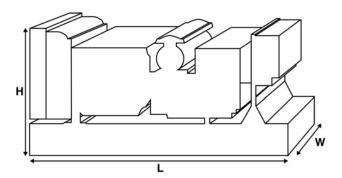




Image for illustration purposes only.

Ratings and Performance Data				
Engine Make & Model:		Perkins® 1103C	-33TG2/3	
Alternator manufactured for FG Wilson by:		Leroy Somer		
Alternator Model:		LLB1514P		
Control Panel:		DCP-10		
Base Frame:		Heavy Duty Fabr	icated Steel	
Circuit Breaker Type:		3 Pole MCCB		
Frequency:		50 Hz	60 Hz	
Engine Speed: RPM		1500	-	
Fuel Tank Capacity: litres (US gal)		145 (3	38.3)	
Fuel Consumption: I/hr (US gal/hr))			
(100% Load)	- Prime	10.2 (2.7)	-	
	- Standby	11.3 (3.0)	-	

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 and Weights				
Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	Dry kg (lb)	Wet kg (lb)
1680 (66.1)	760 (29.9)	1336 (52.6)	758 (1671)	771 (1700)
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:		3 / In Line	
Cycle:		4 Stroke	
Bore / Stroke: mm (in)		105.0 (4.1)/127.0 (5.0)	
Induction:		Turbocharged	
Cooling Method:		Water	
Governing Type:		Mechanical	
Governing Class:		ISO 8528 G2	
Compression Ratio:		18.23:1	
Displacement: I (cu. in)		3.3 (201.4)	
Moment of Inertia: kg m ² (Ib/in ²)		1.14 (3896)	
Engine Electrical Syste	em:		
- Voltage	e / Ground	12/Negative	
- Battery Charger Amps		65	
Weight: kg (lb)	- Dry	341 (752)	
	- Wet	348 (767)	

Air Systems	50 Hz	60 Hz
Air Filter Type:	Replaceable	e Element
Combustion Air Flow: m ³ /min (cfm)		
- Prime	4.3 (153)	-
- Standby	4.4 (156)	-
Max. Combustion Air Intake Restriction: kPa (in H ₂ O)	8.0 (32.1)	-

Cooling System		50 Hz	60 Hz
Cooling System Capacity: I (US	gal)	12.6 (3.3)	-
Water Pump Type:		Centrifu	ıgal
Heat Rejected to Water & Lub	e Oil:		
kW (Btu/min)	- Prime	38.0 (2161)	-
	- Standby	42.0 (2388)	-
Heat Radiation to Room: Heat	radiated from o	engine and alternator	
kW (Btu/min)	- Prime	13.0 (739)	
	- Standby	17.0 (967)	
Radiator Fan Load: kW (hp)		1.0 (1.3)	-
Radiator Cooling Airflow: m³/m	in (cfm)	97.8 (3454)	-
External Restriction to Cooling Airflow: Pa (in H ₂ O)		125 (0.5)	-

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.

Spin-On, Full Flow
8.3 (2.2)
7.8 (2.1)
API CG4 / CH4 15W-40
Water

Exhaust System	50 Hz	60 Hz
Maximum Allowable Back Pressure: ^{kPa} (in Hg)	12.0 (3.5)	-
Exhaust Gas Flow: m ³ /min (cfm)		
- Prime	6.0 (212)	-
- Standby	7.0 (247)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	542 (1008)	-
- Standby	581 (1078)	-

Performance		50 Hz	60 Hz
Engine Speed: rpm	1	1500	-
Gross Engine Pow	ver: kW (hp)		
	- Prime	41.9 (56.0)	-
	- Standby	46.5 (62.0)	-
BMEP: kPa (psi)			
	- Prime	1016.0 (147.4)	-
	- Standby	1127.0 (163.5)	-

F	Fuel System					
F	uel Filter T	уре:	F	Replaceable Element		
Recommended Fuel:			C	Class A2 Diesel or BSEN590		
F	uel Consun	nption: I/hr (US g	al/hr)			
		110%	100%	75%	50%	
	Prime	Load	Load	Load	Load	
	50 Hz	11.3 (3.0)	10.2 (2.7)	7.7 (2.0)	5.5 (1.5)	
	60 Hz	-	-	-	-	
			100%	75%	50%	
	Standby		Load	Load	Load	
	50 Hz		11.3 (3.0)	8.5 (2.2)	6.0 (1.6)	

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

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60 Hz

Alternator Physical Data			
Manufactured for FG Wilson by:	Leroy Somer		
Model:	LLB1514P		
No. of Bearings:	1		
Insulation Class:	Н		
Winding Pitch Code:	2/3 - M		
Wires:	4		
Ingress Protection Rating:	IP23		
Excitation System:	SHUNT		
AVR Model:	R220		

Alternator Operating Data	
Overspeed: rpm	2250
Voltage Regulation: (Steady state)	+/- 1.0%
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)	
- 50 Hz	4.0 (227)
- 60 Hz	-

Alternator Performance Data:		50	Hz	60 Hz
Data Item	240V	230V	220V	
Motor Starting Capability* kVA	88	85	81	
Short Circuit Capacity %	-	-	-	
Reactances: Per Unit				
Xd	1.614	1.757	1.920	
X'd	0.163	0.177	0.193	
X"d	0.081	0.088	0.097	

Reactances shown are applicable to prime ratings. *Based on 30% voltage dip at 0.6 power factor.

Output Ratings Technical Data 50 Hz					Output Ratings Technical Data 60 Hz					
Voltage	Prime:		Standby:		Voltage	Prime:		Standby:		
	kVA	kW	kVA	kW		kVA	kW	kVA	k	
240V	36.0	36.0	40.0	40.0						
230V	36.0	36.0	40.0	40.0						
220V	36.0	36.0	40.0	40.0						

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.

EU stage IIIA 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:

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.