



P1500E1 60 Hz

Output Ratings		
Voltage, Frequency	Prime	Standby
480V, 60 Hz		1500.0 kVA / 1200.0 kW

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.

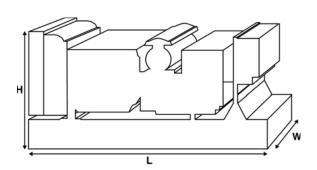


Image for illustration purposes only.

Ratings and Performance D	Pata		
Engine Make & Model:		Perkins® 401	2-46TWG3A
Alternator manufactured for FG Wilson by:	or	Leroy Somer	
Alternator Model:		LL8224P	
Control Panel:		PowerWizard	1.1+
Base Frame:		Heavy Duty F	abricated Steel
Circuit Breaker Type:		3 Pole ACB -	Option
Frequency:		50 Hz	60 Hz
Engine Speed: RPM		-	1800
Fuel Tank Capacity: litres (US gal)			-
Fuel Consumption: I/hr (US ga	ıl/hr)		
(100% Load)	- Prime	-	-
	- Standby	-	324.0 (85.6)

Available Options

 ${\sf FG}$ 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

Dimensions an	nd Weights			
Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	Dry kg (lb)	Wet kg (lb)
4988 (196.4)	1895 (74.6)	2450 (96.5)	9776 (21552)	9977 (21995)
Dry = With Lube Oil Wet = With Lube Oil and Coolant			t	

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

Engine Technical Data	
No. of Cylinders / Alignment:	12 / Vee
Cycle:	4 Stroke
Bore / Stroke: mm (in)	160.0 (6.3)/190.0 (7.5)
Induction:	Turbocharged
Cooling Method:	Water
Governing Type:	Electronic
Governing Class:	ISO 8528
Compression Ratio:	13.0:1
Displacement: I (cu. in)	45.8 (2797.5)
Moment of Inertia: kg m² (lb/in²)	19.30 (65951)
Engine Electrical System:	
- Voltage / Ground	24/Negative
- Battery Charger Amps	40
Weight: kg (lb) - Dry	4440 (9788)
- Wet	4604 (10150)

Performance	50 Hz	60 Hz
Engine Speed: rpm	-	1800
Gross Engine Power: kW (hp)		
- Prime	-	-
- Standby	-	1314.0 (1762.0)
BMEP: kPa (psi)		
- Prime	-	-
- Standby	-	1911.0 (277.2)

Fuel System

Fuel Filter Type: Replaceable Element

Recommended Fuel: Class A2 Diesel or BSEN590

Fuel Consumption: I/hr (US gal/hr)

	110%	100%	75%	50%
Prime	Load	Load	Load	Load
50 Hz		-	-	-
60 Hz		-	-	-

	100%	75%	50%
Standby	Load	Load	Load
50 Hz	-	-	-
60 Hz	324.0 (85.6)	-	-

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

Air Systems	50 Hz	60 Hz
Air Filter Type:	Replaced	able Element
Combustion Air Flow: m³/min (cfm)		
- Prime	e -	-
- Standb	у -	116.0 (4097)
Max. Combustion Air Intake Restriction: $\mbox{\sc kPa}$ (in $\mbox{\sc H}_2\mbox{\sc O}$)	-	-

Cooling System		50 Hz	60 Hz
Cooling System Capacity: I (US gal)		-	196.0 (51.8)
Water Pump Type:		Cen	trifugal
Heat Rejected to Water & Lube O	il:		
kW (Btu/min)	Prime	-	-
- St	andby	-	480.0 (27297
Heat Radiation to Room: Heat radia	ted from er	ngine and alternat	or
kW (Btu/min)	Prime	-	-
- St	andby	-	150.0 (8530)
Radiator Fan Load: kW (hp)		-	51.0 (68.4)
Radiator Cooling Airflow: m³/min (cf	m)	-	1600.0 (56504)
External Restriction to Cooling Airflow: Pa (in H ₂ O)		-	-
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: I (US gal)	177.0 (46.8)
Oil Pan: I (US gal)	157.5 (41.6)
Oil Type:	API CH4 15W-40
Oil Cooling Method:	Water

Exhaust System	50 Hz	60 Hz
Maximum Allowable Back Pressure: kPa (in Hg)	-	-
Exhaust Gas Flow: m³/min (cfm)		
- Prime	-	-
- Standby	-	250.0 (8829)
Exhaust Gas Temperature: °C (°F)		
- Prime	-	-
- Standby	-	478 (892)

Alternator Physical Data	
Manufactured for FG Wilson by:	Leroy Somer
Model:	LL8224P
No. of Bearings:	1
Insulation Class:	Н
Winding Pitch Code:	2/3 - 6S
Wires:	6
Ingress Protection Rating:	IP23
Excitation System:	AREP
AVR Model:	R450M

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	-
- 60 Hz	50.0 (2843)

Alternator Performance Data:	50 Hz	60 Hz		
Data Item		480/277V	380/220V	440/254V
Motor Starting Capability* kVA		5087	3621	4316
Short Circuit Capacity** %		300	300	300
Reactances: Per Unit				
Xd		2.758	4.4	3.282
X'd		0.172	0.274	0.205
X"d		0.096	0.153	0.114

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.

Output Ratir Voltage	ngs Technical Data 50 Hz Prime:		Standby:	
	kVA	kW	kVA	kW

Output Ratin	gs Technica	Data 60 Hz		
Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW
480/277V	-	-	1500.0	1200.0
380/220V	-	-	1500.0	1200.0
440/254V	-	-	1500.0	1200.0

General Information
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 with unlimited hours or two year manufacturer's warranty limited to 6,000 running hours. Standby equipment, limited to 500 running hours per year, has a three year manufacturer's warranty.
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.