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P400-1



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.

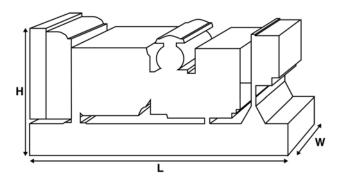




Image for illustration purposes only.

Ratings and Performance Data		
Engine Make & Model:	Perkins® 2206A-E13	BTAG2
Alternator manufactured for FG Wilson by:	Leroy Somer	
Alternator Model:	LL6114B	
Control Panel:	PowerWizard 1.1+	
Base Frame:	Heavy Duty Fabricat	ed Steel
Circuit Breaker Type:	3 Pole MCCB	
Frequency:	50 Hz	60 Hz
Engine Speed: RPM	1500	-
Fuel Tank Capacity: litres (US gal)	888 (234.0	5)
Fuel Consumption: I/hr (US gal/hr)		
(100% Load) - Pr	me 69.6 (18.4)	-
- Star	dby 79.0 (20.9)	-

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

Dimensions ar	nd Weights			
Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	Dry kg (lb)	Wet kg (lb)
3800 (149.6)	1131 (44.5)	2156 (84.9)	3183 (7017)	3241 (7145)
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.

Engine Technical Data		
No. of Cylinders / Alignment:		6 / In Line
Cycle:		4 Stroke
Bore / Stroke: mm (in)		130.0 (5.1)/157.0 (6.2)
Induction:		Turbocharged Air To Air Charge Cooled
Cooling Method:		Water
Governing Type:	Governing Type:	
Governing Class:	Governing Class:	
Compression Ratio:		16.3:1
Displacement: I (cu. in)		12.5 (762.8)
Moment of Inertia: kg m² (lb/in²)		2.77 (9465)
Engine Electrical System	:	
- Voltage / 0	Ground	24/Negative
- Battery Charge	r Amps	70
Weight: kg (lb)	- Dry	1301 (2868)
	- Wet	1351 (2978)

Performance		50 Hz	60 Hz
Engine Speed: rpm		1500	-
Gross Engine Powe	r: kW (hp)		
	- Prime	324.2 (435.0)	-
	- Standby	367.4 (493.0)	-
BMEP: kPa (psi)			
	- Prime	2075.0 (300.9)	-
	- Standby	2350.0 (340.9)	-

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	79.0 (20.9)	69.6 (18.4)	53.0 (14.0)	36.2 (9.6)
60 Hz	-	-	-	-

	100%	75%	50%
Standby	Load	Load	Load
50 Hz	79.0 (20.9)	60.1 (15.9)	41.0 (10.8)
60 Hz	-	-	-

(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:	Non (Canister
Combustion Air Flow: m³/min (cfm)		
- Prim	e 21.3 (752)	-
- Standb	y 23.6 (833)	-
Max. Combustion Air Intake Restriction: kPa (in H ₂ O)	6.4 (25.7)	-

Cooling System	50 Hz	60 Hz
Cooling System Capacity: I (US gal)	45.2 (11.9)	-
Water Pump Type:	Centr	ifugal
Heat Rejected to Water & Lube Oil:		
kW (Btu/min) - Prin	ne 113.5 (6455)	-
- Stand	by 128.5 (7308)	-
Heat Radiation to Room: Heat radiated from engine and alternator		
kW (Btu/min) - Prin	ne 43.9 (2497)	
- Stand	by 56.3 (3202)	
Radiator Fan Load: kW (hp)	14.0 (18.8)	-
Radiator Cooling Airflow: m³/min (cfm)	398.4 (14069)	-
External Restriction to Cooling Airflow: Pa (in H ₂ O)	125 (0.5)	-

Lubrication System	
Oil Filter Type:	Eco, Full Flow
Total Oil Capacity: I (US gal)	40.0 (10.6)
Oil Pan: I (US gal)	38.0 (10.0)
Oil Type:	API CH4 SAE15W-40
Oil Cooling Method:	Water

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.

50 Hz	60 Hz	
10.0 (3.0)	-	
56.6 (1999)	-	
64.8 (2288)	-	
Exhaust Gas Temperature: °C (°F)		
573 (1063)	-	
630 (1166)	-	
	10.0 (3.0) 56.6 (1999) 64.8 (2288) 573 (1063)	

Alternator Physical Data	
Manufactured for FG Wilson by:	Leroy Somer
Model:	LL6114B
No. of Bearings:	1
Insulation Class:	Н
Winding Pitch Code:	2/3 - 6
Wires:	12
Ingress Protection Rating:	IP23
Excitation System:	SHUNT
AVR Model:	R250

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:	4.0%
Radio Interference:	Suppression is in line with European Standard EN61000-6
Radiant Heat: kW (Btu/min)	
- 50 Hz	24.1 (1371)
- 60 Hz	-

Alternator Performance Data:		50	Hz		6
Data Item	415/240V	400/230V	380/220V		
Motor Starting	797	745	678		
Capability* kVA					
Short Circuit	300	300	300		
Capacity** %	300	300	300		
Reactances: Per Unit					
Xd	2.987	3.216	3.563		
X'd	0.172	0.185	0.205		
X"d	0.120	0.130	0.143		

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

**With optional	permanent magnet	generator or	AREP excitation	١.

Voltage	Prime:		Standby:		
	kVA	kW	kVA	kW	
415/240V	350.0	280.0	400.0	320.0	
400/230V	350.0	280.0	400.0	320.0	
380/220V	350.0	280.0	400.0	320.0	

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

A full set of operation and maintenance manuals and circuit wiring diagrams. Generating Set Standards The equipment meets the following standards: B55000, 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:	Documentation
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Dealer contact details:	
	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.

General Information