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# P200-1



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.

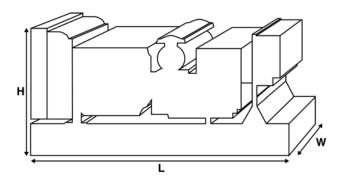




Image for illustration purposes only.

Ratings and Performance Data		
Engine Make & Model:	Perkins™ 1106A-	70TAG3
Alternator manufactured for FG Wilson by:	Leroy Somer	
Alternator Model:	LL5014D	
Control Panel:	DCP-10	
Base Frame:	Heavy Duty Fabri	cated Steel
Circuit Breaker Type:	3 Pole MCCB	
Frequency:	50 Hz	60 Hz
Engine Speed: RPM	1500	-
Fuel Tank Capacity: litres (US gal)	418 (1	10.4)
Fuel Consumption: I/hr (US gal/hr)		
(100% Load) - <b>Pri</b>	ne 40.2 (10.6)	-
- Stanc	by 43.8 (11.6)	-

#### **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			
<b>Length</b> (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	<b>Dry</b> kg (lb)	<b>Wet</b> kg (lb)
2500 (98.4)	1320 (52.0)	1626 (64.0)	1691 (3728)	1718 (3788)
Dry = With Lube	e Oil	Wet = With Lube	e 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)	105.0 (4.1)/135.0 (5.3)
Induction:	Turbocharged Air To Air Charge Cooled
Cooling Method:	Water
Governing Type:	Mechanical
Governing Class:	ISO 8528 G2
Compression Ratio:	16.0:1
Displacement: I (cu. in)	7.0 (427.8)
Moment of Inertia: kg m² (lb/in²	2) 1.26 (4306)
Engine Electrical System:	
- Voltage / Grou	and 12/Negative
- Battery Charger An	n <b>ps</b> 85
Weight: kg (lb)	Dry 788 (1737)
- V	Wet 822 (1812)

Performance		50 Hz	60 Hz
Engine Speed: rpm		1500	-
Gross Engine Powe	er: kW (hp)		
	- Prime	167.6 (225.0)	-
	- Standby	185.5 (249.0)	-
BMEP: kPa (psi)			
	- Prime	1912.0 (277.3)	-
	- Standby	2116.0 (306.9)	-

## 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	43.8 (11.6)	40.2 (10.6)	30.9 (8.2)	19.7 (5.2)
60 Hz	-	-	-	-

	100%	75%	50%
Standby	Load	Load	Load
50 Hz	43.8 (11.6)	34.2 (9.0)	22.3 (5.9)
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:		Paper Ele	ement
Combustion Air Flow: m³/min (cf	fm)		
	- Prime	13.0 (457)	-
	- Standby	13.9 (490)	-
Max. Combustion Air Intake Restriction: $kPa$ (in $H_2O$ )		3.0 (12.0)	-

Cooling System	50 Hz	60 Hz
Cooling System Capacity: I (US gal)	27.0 (7.1)	-
Water Pump Type:	Centr	rifugal
Heat Rejected to Water & Lube Oil:		
kW (Btu/min) - Prin	ne 64.4 (3662)	-
- Stand	by 64.5 (3668)	-
Heat Radiation to Room: Heat radiated from engine and alternator		
kW (Btu/min) - Prin	ne 34.1 (1938)	
- Standl	by 37.6 (2140)	
Radiator Fan Load: kW (hp)	6.3 (8.5)	-
Radiator Cooling Airflow: m³/min (cfm)	307.2 (10849)	-
External Restriction to Cooling Airflow: Pa (in H <sub>2</sub> O)	125 (0.5)	-

Lubrication System	
Oil Filter Type:	Spin-On, Full Flow
Total Oil Capacity: I (US gal)	16.5 (4.4)

Designed to operate in ambient conditions up to  $50^{\circ}$ C ( $122^{\circ}$ F). Contact your local FG Wilson Dealer for power ratings at specific site conditions.

Total Oil Capacity: I (US gal)

Oil Pan: I (US gal)

Oil Type:

API CH4 / CI4 15W-40

Oil Cooling Method:

Water

Exhaust System	50 Hz	60 Hz
Silencer Type:	Indust	trial
Silencer Model & Quantity:	SD100	(1)
Pressure Drop Across Silencer System: kPa (in Hg)	3.50 (1.034)	-
Silencer Noise Reduction Level: dB	10	-
Maximum Allowable Back Pressure: kPa (in Hg)	6.0 (1.8)	-
Exhaust Gas Flow: m³/min (cfm)		
- Prime	31.4 (1110)	-
- Standby	33.9 (1195)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	489 (912)	-

- Standby 538 (1000)

Alternator Physical Data	
Manufactured for FG Wilson by:	Leroy Somer
Model:	LL5014D
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 Regulation: (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	13.2 (751)
- 60 Hz	-

Alternator Performance Data:	50 Hz			60 Hz	
Data Item	415/240V	400/230V 230/115V 200/115V	380/220V 220/110V	220/127V	
Motor Starting  Capability* kVA	352	331	302	389	
Short Circuit Capacity** %	300	300	300	300	
Reactances: Per Unit					
Xd	2.885	3.105	3.440	2.281	
X'd	0.146	0.158	0.175	0.116	
X"d	0.088	0.095	0.105	0.069	

Voltage Technical Data 50 Hz						
Voltage	Pri	me:	Standby:			
	kVA	kW	kVA	kW		
415/240V	180.0	144.0	199.8	159.8		
400/230V	180.0	144.0	200.0	160.0		
380/220V	180.0	144.0	199.8	159.8		
230/115V	180.0	144.0	200.0	160.0		
220/127V	160.0	128.0	176.0	140.8		
220/110V	180.0	144.0	199.8	159.8		
200/115V	180.0	144.0	200.0	160.0		

Voltage Technical Data 60 Hz					
Voltage	Pri	ime:	Standby:		
	kVA	kW	kVA	kW	

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.

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. 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:
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**