

www.FGWilson.com

P13.5-6



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.

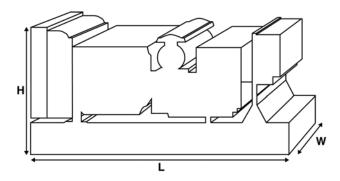




Image for illustration purposes only.

Ratings and Performance Data			
Engine Make & Model:		Perkins® 403D-	15G
Alternator manufactured for FG Wilson by:	ı	Leroy Somer	
Alternator Model:		LL1114D	
Control Panel:	I	DCP-10	
Base Frame:	I	Heavy Duty Fabri	cated Steel
Circuit Breaker Type:		3 Pole MCB	
Frequency:		50 Hz	60 Hz
Engine Speed: RPM		1500	1800
Fuel Tank Capacity: litres (US gal)		62 (16.4)	
Fuel Consumption: I/hr (US gal/hr)			
(100% Load)	- Prime	3.7 (1.0)	4.3 (1.1)
- S	standby	4.0 (1.1)	4.9 (1.3)

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

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	d Weights			
Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	Dry kg (lb)	Wet kg (lb)
1400 (55.1)	620 (24.4)	1054 (41.5)	371 (818)	377 (831)
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)	84.0 (3.3)/90.0 (3.5)	
Induction:	Naturally Aspirated	
Cooling Method:	Water	
Governing Type:	Mechanical	
Governing Class:	ISO 8528	
Compression Ratio:	22.5:1	
Displacement: I (cu. in)	1.5 (91.3)	
Moment of Inertia: kg m² (lb/in²)	2.17 (7415)	
Engine Electrical System:		
- Voltage / Ground	12/Negative	
- Battery Charger Amps	65	
Weight: kg (lb) - Dry	197 (434)	
- Wet	202 (445)	

Performance		50 Hz	60 Hz
Engine Speed: rpm		1500	1800
Gross Engine Powe	er: kW (hp)		
	- Prime	12.2 (16.0)	14.7 (20.0)
	- Standby	13.5 (18.0)	16.2 (22.0)
BMEP: kPa (psi)			
	- Prime	652.0 (94.6)	655.0 (95.0)
	- Standby	722.0 (104.7)	722.0 (104.7)

Fuel S	
FUEL S	vstem
	, 5 ()

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	4.0 (1.1)	3.7 (1.0)	2.8 (0.7)	2.0 (0.5)
60 Hz	4.9 (1.3)	4.3 (1.1)	3.2 (0.8)	2.4 (0.6)

	100%	75%	50%
Standby	Load	Load	Load
50 Hz	4.0 (1.1)	3.0 (0.8)	2.1 (0.6)
60 Hz	4.9 (1.3)	3.5 (0.9)	2.5 (0.7)

(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:	Replaceable Element	
Combustion Air Flow: m³/min (cfm)		
- Prime	1.1 (38)	1.2 (43)
- Standby	1.1 (38)	1.2 (43)
Max. Combustion Air Intake Restriction: kPa (in H_2O)	6.4 (25.7)	6.4 (25.7)

Cooling System	50 Hz	60 Hz
Cooling System Capacity: I (US gal)	6.0 (1.6)	6.0 (1.6)
Water Pump Type:	Cent	trifugal
Heat Rejected to Water & Lube Oil:		
kW (Btu/min) - Prin	ne 11.6 (660)	13.6 (773)
- Stand	by 12.9 (734)	15.2 (864)
Heat Radiation to Room: Heat radiated from	om engine and alternate	or
kW (Btu/min) - Prin	ne 5.4 (307)	6.3 (358)
- Stand	by 6.0 (341)	7.1 (404)
Radiator Fan Load: kW (hp)	0.2 (0.2)	0.3 (0.4)
Radiator Cooling Airflow: m³/min (cfm)	28.8 (1017)	37.2 (1314)
External Restriction to Cooling Airflow: Pa (in H ₂ O)	125 (0.5)	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.

Lubrication System	
Oil Filter Type:	Spin-On, Full Flow
Total Oil Capacity: I (US gal)	6.0 (1.6)
Oil Pan: I (US gal)	4.5 (1.2)
Oil Type:	API CH4 15W-40
Oil Cooling Method:	N/A

Exhaust System	50 Hz	60 Hz
Silencer Type:	Indu	ıstrial
Silencer Model & Quantity:	INI	(1)
Pressure Drop Across Silencer System: kPa (in Hg)	0.56 (0.165)	0.80 (0.236)
Silencer Noise Reduction Level: dB	30	18.6
Maximum Allowable Back Pressure: kPa (in Hg)	10.2 (3.0)	10.2 (3.0)
Exhaust Gas Flow: m³/min (cfm)		
- Prime	2.7 (95)	3.1 (111)
- Standby	2.9 (102)	3.4 (119)
Exhaust Gas Temperature: °C (°F)		
- Prime	445 (833)	455 (851)
- Standby	490 (914)	505 (941)

Alternator Physical Data	
Manufactured for FG Wilson by:	Leroy Somer
Model:	LL1114D
No. of Bearings:	1
Insulation Class:	Н
Winding Pitch Code:	2/3 - 6
Wires:	12
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	2.5 (142)			
- 60 Hz	2.8 (159)			

Alternator Performance Data:	50 Hz			60 Hz	
Data Item	415/240V	400/230V	380/220V	220/127V	
Motor Starting Capability* kVA	28	27	25	27	
Short Circuit Capacity %	-	-	-	-	
Reactances: Per Unit					
Xd	1.938	2.086	2.311	2.482	
X'd	0.200	0.216	0.239	0.257	
X"d	0.100	0.108	0.119	0.128	

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

Output Ratings Technical Data 50 Hz				
Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW
415/240V	12.5	10.0	13.5	10.8
400/230V	12.5	10.0	13.5	10.8
380/220V	12.5	10.0	13.5	10.8

Output Ratings Technical Data 60 Hz					
Voltage	Prime:		Standby:		
	kVA	kW	kVA	kW	
220/127V	15.0	12.0	16.5	13.2	

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. 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

General Information