

P13.5-6 (skid)

Output Ratings

Voltage, Frequency	Prime	Standby
400/230V, 50 Hz	12.5 kVA / 10.0 kW	13.5 kVA / 10.8 kW
220/127V, 60 Hz	15.0 kVA / 12.0 kW	16.5 kVA / 13.2 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.

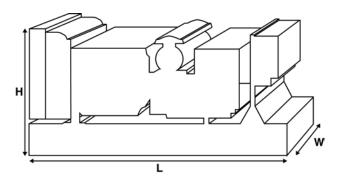




Image for illustration purposes only.

	Perkins 403D-15	G
I	Leroy Somer	
	LL1114D	
I	DSE4520	
I	Heavy Duty Fabricated Steel	
	3 Pole MCB	
	50 Hz	60 Hz
	1500	1800
	N/A	
Prime	3.7 (1.0)	4.3 (1.1)
tandby	4.0 (1.1)	4.9 (1.3)
	Prime	3 Pole MCB 50 Hz 1500 N/ Prime 3.7 (1.0)

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 an	nd Weights			
Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	Dry kg (lb)	Wet kg (lb)
1500 (59.1)	860 (33.9)	895 (35.2)	306 (674.6)	312 (687.8)
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 / Align	ment:	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 m	¹² (lb/in²)	2.17 (7415)	
Engine Electrical System	m:		
- Voltage	/ Ground	12/Negative	
- Battery Charg	jer Amps	65	
Weight: kg (lb)	- Dry	197 (434)	
	- Wet	202 (445)	

Performance		50 Hz	60 Hz
Engine Speed: rpr	n	1500	1800
Gross Engine Po	wer: 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)

F	Fuel System				
F	Fuel Filter Type: Replaceable Element				
R	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%

	10070	1010	0070
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:	Replaceab	le Element
Combustion Air Flow: m ³ /min (cfm)		
- Prime	1.1 (38)	1.2 (43)
- Standby	1.1 (38)	1.2 (43)
Max. Combustion Air Intake Restriction: kPa (in H ₂ O)	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:	Cen	trifugal		
Heat Rejected to Water & Lube Oil:				
kW (Btu/min) - Prin	ne 11.6 (660)	13.6 (773)		
- Stand	oy 12.9 (734)	15.2 (864)		
Heat Radiation to Room: Heat radiated from engine and alternator				
kW (Btu/min) - Prin	ne 5.4 (307)	6.3 (358)		
- Stand	oy 6.0 (341)	7.1 (404)		
Radiator Fan Load: kW (hp)	0.2 (0.2)	0.3 (0.4)		
Radiator Cooling Airflow: m ³ /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.

Spin-On, Full Flow
6.0 (1.6)
4.5 (1.2)
API CH4 15W-40
N/A

Exhaust System	50 Hz	60 Hz
Maximum Allowable Back Pressure: kPa (in Hg)	10.2 (3.0)	10.2 (3.0)
Exhaust Gas Flow: m ³ /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)	+/- 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	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 and SHUNT excitation.

Prii	Prime:		ndby:	Voltage	Prime:		Standby:	
kVA	kW	kVA	kW		kVA	kW	kVA	
12.5	10.0	13.5	10.8					
12.5	10.0	13.5	10.8	220/127V	15.0	12.0	16.5	
12.5	10.0	13.5	10.8					
	kVA 12.5 12.5	kVAkW12.510.012.510.0	kVAkWkVA12.510.013.512.510.013.5	kVAkWkVAkW12.510.013.510.812.510.013.510.8	kVAkWkVAkW12.510.013.510.812.510.013.510.8220/127V	kVA kW kVA kW kVA kVA kVA kVA kVA 12.5 10.0 13.5 10.8 220/127V 15.0 15.0 </td <td>kVAkWkVAkW12.510.013.510.812.510.013.510.8220/127V15.013.510.8220/127V</td> <td>kVA kW kVA kW kVA kW kVA 12.5 10.0 13.5 10.8 </td>	kVAkWkVAkW12.510.013.510.812.510.013.510.8220/127V15.013.510.8220/127V	kVA kW kVA kW kVA kW kVA 12.5 10.0 13.5 10.8

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.