

Engine Technical Data	
No. of Cylinders / Alignment:	3 / In Line
Cycle:	4 Stroke
Bore / Stroke: mm (in)	105.0 (4.1)/127.0 (5.0)
Induction:	Naturally Aspirated
Cooling Method:	Water
Governing Type:	Mechanical
Governing Class:	ISO 8528 G2
Compression Ratio:	19.25:1
Displacement: l (cu. in)	3.3 (201.4)
Moment of Inertia: kg m ² (lb/in ²)	1.14 (3896)
Engine Electrical System:	
- Voltage / Ground	12/Negative
- Battery Charger Amps	65
Weight: kg (lb)	
- Dry	412 (908)
- Wet	430 (948)

Performance	50 Hz	60 Hz
Engine Speed: rpm	1500	1800
Gross Engine Power: kW (hp)		
- Prime	28.2 (38.0)	33.1 (44.0)
- Standby	31.0 (42.0)	36.5 (49.0)
BMEP: kPa (psi)		
- Prime	684.0 (99.2)	669.0 (97.0)
- Standby	752.0 (109.0)	738.0 (107.0)

Fuel System				
Fuel Filter Type:	Replaceable Element			
Recommended Fuel:	Class A2 Diesel			
Fuel Consumption: l/hr (US gal/hr)				
	110%	100%	75%	50%
Prime	Load	Load	Load	Load
50 Hz	7.7 (2.0)	7.0 (1.8)	5.2 (1.4)	3.8 (1.0)
60 Hz	9.0 (2.4)	8.1 (2.1)	6.2 (1.6)	4.7 (1.2)
		100%	75%	50%
Standby		Load	Load	Load
50 Hz		7.7 (2.0)	5.7 (1.5)	4.1 (1.1)
60 Hz		9.0 (2.4)	6.8 (1.8)	5.0 (1.3)

(Based on diesel fuel with a specific gravity of 0.85 and conforming to BS2869, Class A2, EN590)

Air Systems	50 Hz	60 Hz
Air Filter Type:	Replaceable Element	
Combustion Air Flow: m ³ /min (cfm)		
- Prime	2.2 (76)	2.6 (92)
- Standby	2.2 (76)	2.6 (91)
Max. Combustion Air Intake Restriction: kPa (in H ₂ O)	6.5 (26.1)	6.5 (26.1)

Cooling System	50 Hz	60 Hz
Cooling System Capacity: l (US gal)	10.2 (2.7)	10.2 (2.7)
Water Pump Type:	Centrifugal	
Heat Rejected to Water & Lube Oil:		
kW (Btu/min)		
- Prime	16.0 (910)	18.0 (1024)
- Standby	18.0 (1024)	22.0 (1251)
Heat Radiation to Room: Heat radiated from engine and alternator		
kW (Btu/min)		
- Prime	7.9 (449)	8.2 (466)
- Standby	9.3 (529)	9.7 (552)
Radiator Fan Load: kW (hp)	0.3 (0.4)	0.5 (0.7)
Radiator Cooling Airflow: m ³ /min (cfm)	62.6 (2211)	84.8 (2995)
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: l (US gal)	8.3 (2.2)
Oil Pan: l (US gal)	7.8 (2.1)
Oil Type:	API CG4 / CH4 15W-40
Oil Cooling Method:	Water

Exhaust System	50 Hz	60 Hz
Silencer Type:	Industrial	
Silencer Model & Quantity:	SD50 (1)	
Pressure Drop Across Silencer System: kPa (in Hg)	1.80 (0.532)	2.00 (0.591)
Silencer Noise Reduction Level: dB	20	19
Maximum Allowable Back Pressure: kPa (in Hg)	8.0 (2.4)	10.0 (3.0)
Exhaust Gas Flow: m ³ /min (cfm)		
- Prime	5.7 (201)	6.4 (226)
- Standby	5.8 (205)	6.6 (233)
Exhaust Gas Temperature: °C (°F)		
- Prime	500 (932)	520 (968)
- Standby	520 (968)	530 (986)

Alternator Physical Data	
Manufactured for FG Wilson by:	Leroy Somer
Model:	LL1514F
No. of Bearings:	1
Insulation Class:	H
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:	5.0%
Radio Interference:	Suppression is in line with European Standard EN61000-6
Radiant Heat: kW (Btu/min)	
- 50 Hz	3.3 (188)
- 60 Hz	3.7 (210)

Alternator Performance Data:	50 Hz				60 Hz				
	415/240V	400/230V 230/115V 200/115V	380/220V 220/110V	220/127V	480/277V 240/139V	380/220V 220/110V	240/120V 208/120V	230/115V	440/254V 220/127V
Motor Starting Capability* kVA	72	68	63	78	78	55	63	59	69
Short Circuit Capacity %	-	-	-	-	-	-	-	-	-
Reactances: Per Unit									
Xd	2.298	2.474	2.741	2.045	2.323	3.706	3.092	3.345	2.764
X'd	0.143	0.153	0.170	0.127	0.144	0.230	0.192	0.207	0.171
X''d	0.071	0.077	0.085	0.063	0.072	0.115	0.096	0.104	0.086

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

Voltage Technical Data 50 Hz				
Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW
415/240V	30.0	24.0	33.0	26.4
400/230V	30.0	24.0	33.0	26.4
380/220V	30.0	24.0	33.0	26.4
230/115V	30.0	24.0	33.0	26.4
220/127V	30.0	24.0	33.0	26.4
220/110V	30.0	24.0	33.0	26.4
200/115V	30.0	24.0	33.0	26.4

Voltage Technical Data 60 Hz				
Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW
480/277V	33.8	27.0	37.5	30.0
220/127V	33.8	27.0	37.5	30.0
380/220V	33.8	27.0	37.4	29.9
240/120V	33.8	27.0	37.5	30.0
230/115V	33.8	27.0	37.5	30.0
440/254V	33.8	27.0	37.5	30.0
220/110V	33.8	27.0	37.4	29.9
208/120V	33.8	27.0	37.5	30.0
240/139V	33.8	27.0	37.5	30.0

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:

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

In line with our policy of continuous product development, we reserve the right to change specification without notice.