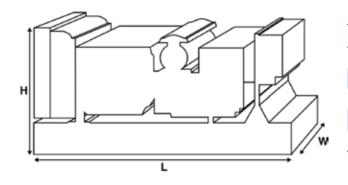


Output Ratings				
Voltage, Frequency		Prime	Standby	
400/230 V, 50 Hz	kVA kW	180 144	200 160	
	kVA kW			



Ratings at 0.8 power factor.

Please refer to the output ratings technical data section for specific generator set outputs per voltage.



Dimension	Dimensions and Weights				
Length	mm	2510 (98.8)			
Width	mm	1010 (39.8)			
Height	mm	1640 (64.6)			
Weight (Dry)	kg	1572 (3466)			
Weight (Wet)	kg	1593 (3512)			

Ratings in accordance with ISO 8528, ISO 3046, IEC 60034,
BS5000 and NEMA MG-1.22.

Generator set pictured may include optional accessories.

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.

FG Wilson offer a range of optional features to allow you to tailor our generator sets to meet your power needs. Options available 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



Ratings and Perfo	rmance Data		
Engine Make		Perkins	
Engine Model:		1106D-E70TAG4	
Alternator Make		FG Wilson	
Alternator Model:		FGL30120	
Control Panel:		FG100	
Base Frame:		Heavy Duty Fabricated	Steel
Circuit Breaker Type:		3 Pole MCCB	
Frequency:		50 HZ	60 HZ
Engine Speed: RPM	rpm	1500	
Fuel Tank Capacity:	litres (US gal)	394 (104.08)	
Fuel Consumption Prime	litres (US gal)/hr	41.3 (10.9)	
Fuel Consumption Standb	oy litres (US gal)/hr	45.2 (11.9)	
Engine Technical D	Data		
No. of Cylinders		6	
Alignment		IN LINE	
Cycle		4 STROKE	
Bore	mm (in)	105 (4.1)	
Stroke	mm (in)	135 (5.3)	
Induction		TURBOCHARGED AIR T	O AIR CHARGE COOLED
Cooling Method		WATER	
Governing Type		ELECTRONIC	
Governing Class		ISO 8528 G2	
Compression Ratio		16.8:1	
Displacement	L (cu. in)	7 (427.8)	
Moment of Inertia:	kg m² (lb/in²)	1.53 (5228)	
Voltage		12	
Ground		Negative	
Battery Charger Amps		65	
Engine Weight Dry	kg (lb)	788 (1737)	
Engine Weight Wet	kg (lb)	822 (1812)	
Engine Performar	nce Data	50 Hz	60 Hz
Engine Speed	rpm	1500	
Gross Engine Power Prime	·	171.5 (230)	
Gross Engine Power Stand		188.7 (253)	
BMEP Prime	kPa (psi)	1956 (283.7)	
BMEP Standby	kPa (psi)	2153 (312.2)	



Fuel System					
Fuel Filter Type:			Replaceable Eler	ment	
Recommended Fuel:			Class A2 Diesel		
Fuel Consumption at		110 % Load	100 % Load	75 % Load	50 % Load
50 Hz Prime:	l/hr (US gal/hr)	45.2 (11.9)	41.3 (10.9)	32.6 (8.6)	23.7 (6.3)
50 Hz Standby	l/hr (US gal/hr)	-	45.2 (11.9)	35.5 (9.4)	25.7 (6.8)
60 Hz Prime	l/hr (US gal/hr)				
60 Hz Standby	l/hr (US gal/hr)	-			

(Based on diesel fuel with a specific gravity of 0.83 and conforming to BS2869 classA2,EN590 $\,$

Air System		50 Hz		60 Hz	
Air Filter Type:			Replace	eable Element	
Combustion Air Flow Prime	m³/min (cfm)	12.8 (452)			
Combustion Air Flow Standby	m³/min (cfm)	13.2 (466)			
Max. Combustion Air Intake Restriction	kPa	8 (32.1)			

Cooling System		50 Hz	60 Hz
Cooling System Capacity	l (US gal)	27 (7.1)	
Water Pump Type:			Centrifugal
Heat Rejected to Water & Lube Oil: Prime	kW (Btu/min)	72.7 (4134)	
Heat Rejected to Water & Lube Oil: Standby	kW (Btu/min)	80.8 (4595)	
Heat Radiation to Room*: Prime	kW (Btu/min)	38.9 (2212)	
Heat Radiation to Room*: Standby	kW (Btu/min)	42 (2388)	
Radiator Fan Load:	kW (hp)	6.3 (8.5)	
Radiator Cooling Airflow:	m³/min (cfm)	328 (11583)	
External Restriction to Cooling Airflow:	Pa (in H2O)	125 (0.5)	

^{*:} Heat radiated from engine and alternator

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 Sys	Lubrication System			
Oil Filter Type:		Spin-On, Full Flow		
Total Oil Capacity:	I (US gal)	17.5 (4.6)		
Oil Pan Capacity:	I (US gal)	15.5 (4.1)		
Oil Type:		API CH4 / CI4 15W-40		
Oil Cooling Method:		WATER		

Exhaust System		50 Hz	60 Hz
Maximum Allowable Back Pressure:	kPa (in Hg)	15 (4.4)	
Exhaust Gas Flow: Prime	m³/min (cfm)	30.2 (1067)	
Exhaust Gas Flow: Standby	m³/min (cfm)	31.7 (1119)	
Exhaust Gas Temperature: Prime	°C (°F)	530 (986)	
Exhaust Gas Temperature: Standby	°C (°F)	530 (986)	

Alternator Physical Data



No. of Bearings:				1	
Insulation Class:				Н	
Winding Pitch:				2/3	
Winding Code				6P/6S	
Wires:				4	
Ingress Protection Rating:				IP23	
Excitation System:				SHUNT	
AVR Model:				R120	
* dependant on voltage code selected					
Alternator Operating Data	a				
Overspeed: rpm				2250	
Voltage Regulation: (Steady state)	%			+/- 0.5	
Wave Form NEMA = TIF:				50	
Wave Form IEC = THF:	%			2	
Total Harmonic content LL/LN:	%			2	
Radio Interference:				EN61000-6	
Radiant Heat: 50 Hz	kW (Btu/min)			12.2 (694)	
Radiant Heat: 60 Hz	kW (Btu/min)				
Alternator Performance D	ata 50 Hz:				
		415/240 V	400/230 V	380/220 V	

	X'd

Alternator Performance Data 60 Hz

kVA

%

Xd

Voltage Code

Voltage Code

Reactances

Motor Starting Capability*

Short Circuit Capacity**

Motor Starting Capability*	kVA					
Short Circuit Capacity**	%	270	270	270	270	270
Reactances	Xd					
	X'd					
	X"d					

328

270

3.19

0.158

0.102

307

270

3.44

0.17

0.102

280

270

3.809

0.188

0.113

270

Reactances shown are applicable to prime ratings.

^{*}Based on 30% voltage dip at 0.6 power factor.

^{**} With optional independant excitation system (PMG / AUX winding)



Output Ratings	50 Hz				
		Prime		Standby	
Voltage Code	kVA	kW	kVA	kW	
415/240V	180	144	200	160	
400/230V	180	144	200	160	
380/220V	180	144	200	160	
230/115V					
220/127V					
220/110V					
200/115V					
240V					
230V					
220V					
Output Ratings	60 U=			·	
Output Natings	5 00 HZ	Prime		Standby	
Voltage Code	kVA	kW	kVA	kW	
480/277V					
440/254V					
416/240V					
400/230V					
380/220V					
240/139V					
240/120V					
230/115V					
220/127V					
220/110V					
208/120V					
240/120					
220/110					





Dealer Contact Details					

Documentation

Operation and maintenance manual including circuit wiring diagrams.

Generator Set Standards

The equipment meets the following standards: BS5000, ISO 8528, ISO 3046, IEC 60034, NEMA MG-1.22.

Warranty

6.8 – 750 kVA electric power generation products in prime applications the warranty period is 12 months from date of start-up, unlimited hours (8760). For standby applications the warranty period is 24 months from date of start-up, limited to 500 hours per year.

730 – 2500 kVA electric power generation products in prime applications the warranty period is 12 months from date of start-up, unlimited hours (8760 hours) or 24 months from date of start-up, limited to 6000 hours. For standby applications the warranty period is 36 months from date of start-up, limited to 500 hours per year.

FG Wilson manufactures product in the following locations:

Northern Ireland • Brazil • China • India

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.