

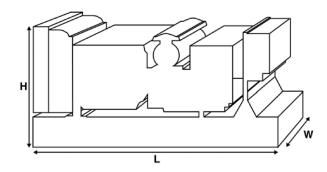


Output Rati	ings		
Voltage, Frequency		Prime	Standby
400\/ 50 -	kVA	650	715
400V, 50 Hz	kW	520	572
480V, 60 Hz	kVA		
	kW		



Ratings at 0.8 power factor.

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



Dimension	ns and Weights	
Length	mm	3900 (153.5)
Width	mm	1461 (57.5)
Height	mm	2156 (84.9)
Weight (Dry)	kg	4454 (9819)
Weight (Wet)	kg	4522 (9969)

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

Head Office

St Ivel Way, Warmley, Bristol BS30 8TY T. 0370 850 0858 F. 0370 850 0851











Ratings and Perf	ormance Data		
Engine Make		Perkins	
Engine Model:		2806A-E18TAG2	
Alternator Make		FG Wilson	
Alternator Model:		FG33A560	
Control Panel:		Power Wizard 1+	
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)	1132 (299.04)	
Fuel Consumption Prim	ne litres (US gal)	127.6 (33.7)	
Fuel Consumption Stan	dby litres (US gal)	142 (37.5)	
Engine Technical	Data		
No. of Cylinders	Data	6	
Alignment		IN LINE	
Cycle		4 STROKE	
Bore	mm (in)	145 (5.7)	
Stroke	mm (in)	183 (7.2)	
Induction	11111 (111)	TURBOCHARGED AIR TO) AIR CHARGE COOLED
Cooling Method		WATER	
Governing Type		ELECTRONIC	
Governing Class		ISO 8528 G2	
Compression Ratio		14.5:1	
Displacement	L (cu. in)	18.1 (1104.5)	
Moment of Inertia:	kg m² (lb/in²)	7.05 (24091)	
Voltage	Ng 111 (1071117)	24	
Ground		Negative	
Battery Charger Amps		70	
Engine Weight Dry	kg (lb)	2050 (4519)	
Engine Weight Wet	kg (lb)	2158 (4758)	
Engine Performa	ance Data	50 Hz	60 Hz
Engine Speed	rpm	1500	
Gross Engine Power Prin	me kW (hp)	584 (783)	
Gross Engine Power Sta	ndby kW (hp)	628 (842)	
BMEP Prime	kPa (psi)	2577 (373.7)	



kPa (psi)

BMEP Standby

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2771 (401.9)

Fuel System					
Fuel Filter Type:			Eco Replaceable	Element	
Recommended Fuel:			Class A2 Diesel		
Fuel Consumption at		110 % Load	100 % Load	75 % Load	50 % Load
50 Hz Prime:	l/hr (US gal/hr)	142 (37.5)	127.6 (33.7)	94.8 (25)	66 (17.4)
50 Hz Standby	l/hr (US gal/hr)	-	142 (37.5)	104 (27.5)	71.5 (18.9)
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 0.85 and conforming to BS2869 classA2,EN590

Air System		50 Hz		60 Hz	
Air Filter Type:		Non Canister			
Combustion Air Flow Prime	m³/min (cfm)	37 (1307)			
Combustion Air Flow Standby	m³/min (cfm)	40 (1413)			
Max. Combustion Air Intake Restriction	kPa	6.4 (25.7)			

Cooling System		50 Hz	60 Hz	
Cooling System Capacity	l (US gal)	68.5 (18.1)	<u>'</u>	
Water Pump Type:			Centrifugal	
Heat Rejected to Water & Lube Oil: Prime	kW (Btu/min)	202 (11488)		
Heat Rejected to Water & Lube Oil: Standby	kW (Btu/min)	219 (12454)		
Heat Radiation to Room*: Prime	kW (Btu/min)	69.3 (3941)		
Heat Radiation to Room*: Standby	kW (Btu/min)	76.1 (4328)		
Radiator Fan Load:	kW (hp)	9 (12.1)		
Radiator Cooling Airflow:	m³/min (cfm)	373.2 (13179)		
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	tem	
Oil Filter Type:		Eco, Full flow
Total Oil Capacity:	I (US gal)	62 (16.4)
Oil Pan Capacity:	l (US gal)	53 (14)
Oil Type:		API CH4 / CI4
Oil Cooling Method:		WATER

Exhaust System		50 Hz	60 Hz
Maximum Allowable Back Pressure:	kPa (in Hg)	6.9 (2)	
Exhaust Gas Flow: Prime	m³/min (cfm)	106 (3743)	
Exhaust Gas Flow: Standby	m³/min (cfm)	114 (4026)	
Exhaust Gas Temperature: Prime	°C (°F)	555 (1031)	
Exhaust Gas Temperature: Standby	°C (°F)	553 (1027)	



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Alternator Physical D	ata				
No. of Bearings:				1	
Insulation Class:				Н	
Winding Pitch:				2/3	
Winding Code				R16	
Wires:				6	
Ingress Protection Rating:				IP21	
Excitation System:				SHUNT	
AVR Model:				A-OPT-04E	
Alternator Operating					
Overspeed: rpm				2250	
Voltage Regulation: (Steady st	ate)			+/- 1.0	
Wave Form NEMA = TIF:				50	
Wave Form IEC = THF:			2		
Total Harmonic content LL/LN:			3		
Radio Interference:			EN61000-6		
Radiant Heat: 50 Hz	kW (Btu/min)		31.1 (1769)		
Radiant Heat: 60 Hz	kW (Btu/min)				
Alternator Performa	nce Data 50 Hz:				
		415/240 V	400/230 V	380/220 V	
Voltage Code					
			230 V		
Motor Starting Capability*	kVA	1763	1650	1488	
Short Circuit Capacity	%	300	300	300	300
Reactances	Xd	2.327	2.504	2.775	
	X'd	0.106	0.114	0.126	
	X"d	0.089	0.089	0.099	

300

Reactances shown are applicable to prime ratings.

kVA

%

Xd

X'd X"d 300

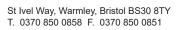
Voltage Code

Reactances

Motor Starting Capability*

Short Circuit Capacity





300





300



300



^{*}Based on 30% voltage dip at 0.4 power factor.

Output Ratings	5 50 Hz				
		Prime		Standby	
Voltage Code	kVA	kW	kVA	kW	
415/240V	650	520	715	572	
400/230V	650	520	715	572	
380/220V	650	520	715	572	
230/115V	650	520	715	572	
220/127V					
220/110V					
200/115V					
240V					
230V					
220V					
Output Ratings	5 60 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					
208/120V 240/120					







