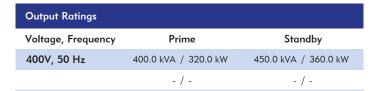


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P450-3



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.

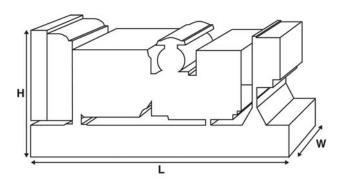




Image for illustration purposes only.

Ratings and Performance Do	ıta		
Engine Make & Model:		Perkins® 2206A-	E13TAG3
Alternator manufactured for FG Wilson by:		FG Wilson	
Alternator Model:		EG315M-320N	
Control Panel:		PowerWizard 1.1	+
Base Frame:		Heavy Duty Fabri	cated Steel
Circuit Breaker Type:		3 Pole MCCB	
Frequency:		50 Hz	60 Hz
Engine Speed: rpm		1500	-
Fuel Tank Capacity: litres (US gal)		888 (234.6)	
Fuel Consumption: I/hr (US gal/	hr)		
(100% Load)	- Prime	78.2 (20.7)	-
	- Standby	87.2 (23.0)	-

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)
3800 (149.6)	1131 (44.5)	2156 (84.9)	3195 (7044)	3253 (7172)
Dry = With Lube	Oil	Wet = With Lube	e 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 Da	ta	
No. of Cylinders / Alignment:		6 / In Line
Cycle:		4 Stroke
Bore / Stroke: mm (in)		130.0 (5.1)/157.0 (6.2)
Induction:		Turbocharged Air To Air Charge Cooled
Cooling Method:		Water
Governing Type:		Electronic
Governing Class:		ISO 8528 G2
Compression Ratio:		16.3:1
Displacement: I (cu. in)		12.5 (762.8)
Moment of Inertia: kg m² (lb/in²)		2.77 (9465)
Engine Electrical Sys	tem:	
- Voltag	e / Ground	24/Negative
- Battery Cha	ırger Amps	70
Weight: kg (lb)	- Dry	1301 (2868)
	- Wet	1351 (2978)

Performance		50 Hz	60 Hz
Engine Speed: rpm	1	1500	-
Gross Engine Pow	ver: kW (hp)		
	- Prime	368.4 (494.0)	-
	- Standby	412.5 (553.0)	-
BMEP: kPa (psi)			
	- Prime	2357.0 (341.9)	-
	- Standby	2639.0 (382.8)	-

Fuel System	
Fuel Filter Type:	Replaceable Element
Recommended Fuel:	Class A2 Diesel or BSEN590

 $\pmb{Fuel\ Consumption:}\ \textit{I/hr}\ (\textit{US\ gal/hr})$

	110%	100%	75%	50%
Prime	Load	Load	Load	Load
50 Hz	87.2 (23.0)	78.2 (20.7)	60.0 (15.9)	41.8 (11.0)
60 Hz	-	-	-	-

	100%	75%	50%
Standby	Load	Load	Load
50 Hz	87.2 (23.0)	66.7 (17.6)	46.4 (12.3)
60 Hz	-	-	-

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

50 Hz	60 Hz
Non Co	ınister
24.3 (858)	-
26.4 (932)	-
6.4 (25.7)	-
	Non Co 24.3 (858) 26.4 (932)

Cooling System		50 Hz	60 Hz
Cooling System Capacity: I (US	gal)	45.2 (11.9)	-
Water Pump Type:		Centri	fugal
Heat Rejected to Water & Lub	e Oil:		
kW (Btu/min)	- Prime	127.3 (7239)	-
	- Standby	139.9 (7956)	-
Heat Radiation to Room: Heat r	adiated from	engine and alternator	
kW (Btu/min)	- Prime	54.4 (3094)	
	- Standby	64.7 (3679)	
Radiator Fan Load: kW (hp)		14.0 (18.8)	-
Radiator Cooling Airflow: m³/mi	in (cfm)	398.4 (14069)	-
External Restriction to Cooling Airflow: Pa (in H ₂ O)		125 (0.5)	-

Lubrication System	
Oil Filter Type:	Eco, Full Flow
Total Oil Capacity: I (US gal)	40.0 (10.6)
Oil Pan: I (US gal)	38.0 (10.0)
Oil Type:	API CH4 SAE15W-40
Oil Coolina Method:	Water

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.

Exhaust System	50 Hz	60 Hz
	10.0 (3.0)	-
Exhaust Gas Flow: m³/min (cfm)		
- Prime	64.6 (2281)	-
- Standby	72.5 (2560)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	573 (1063)	-
- Standby	630 (1166)	-

Alternator Physical Data	
Manufactured for FG Wilson by:	FG Wilson
Model:	EG315M-320N
No. of Bearings:	1
Insulation Class:	Н
Winding Pitch Code:	2/3 - R1
Wires:	12
Ingress Protection Rating:	IP21
Excitation System:	SHUNT
AVR Model:	EVC600i

Alternator Operating Data					
Overspeed: rpm	2250				
Voltage Regulation: (Steady state)	+/-1%				
Wave Form NEMA = TIF:	50				
Wave Form IEC = THF:	2.0%				
Total Harmonic content LL/LN:	3.0%				
Radio Interference:	-				
Radiant Heat: kW (Btu/min)					
- 50 Hz	24.9 (1416)				
- 60 Hz	-				

Alternator Performance Data:	50 Hz		60 Hz		
Data Item	415/240V	400/230V	380/220V		
		230 V			
Motor Starting	070	005	005		
Capability* kVA	973	895	805		
Short Circuit					
Capacity** %	300	300	300		
Reactances: Per Unit					
Xd	3.084	3.320	3.494		
X'd	0.113	0.121	0.127		
X"d	0.102	0.110	0.116		

Output Ratings Technical Data 50 Hz						
Voltage	Prime:		Standby:			
	kVA	kW	kVA	kW		
415/240V	400.0	320.0	450.0	360.0		
400/230V	400.0	320.0	450.0	360.0		
380/220V	380.0	304.0	437.0	349.6		
230 V	400.0	320.0	450.0	360.0		

Output Ratings Technical Data 60 Hz					
Voltage	Prime:		Standby:		
	kVA	kW	kVA	kW	

Reactances shown are applicable to prime ratings.
*Based on 30% voltage dip at 0.4 power factor and SHUNT excitation.
**With optional permanent magnet generator or AREP excitation.

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. 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