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P500-3

Output Ratings		
Voltage, Frequency	Prime	Standby
400V, 50 Hz	450.0 kVA / 360.0 kW	500.0 kVA / 400.0 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 $(77^{\circ}F)$ 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.

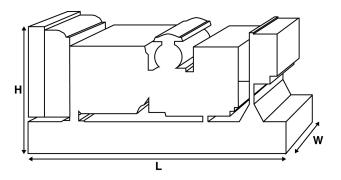




Image for illustration purposes only.

Ratings and Performance Da	ıta		
Engine Make & Model:		Perkins 2506A-E	15TAG1
Alternator manufactured for FG Wilson by:		FG Wilson	
Alternator Model:		EG315-360N	
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/h	nr)		
(100% Load)	- Prime	91.3 (24.1)	-
	- Standby	101.5 (26.8)	-

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 ar	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)	2215 (87.2)	3603 (7943)	3661 (8071)
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 / Alignment	: 6 / In Line
Cycle:	4 Stroke
Bore / Stroke: mm (in)	137.0 (5.4)/171.0 (6.7)
Induction:	Turbocharged Air To Air Charge Cooled
Cooling Method:	Water
Governing Type:	Electronic
Governing Class:	ISO 8528 G2
Compression Ratio:	16.0:1
Displacement: I (cu. in)	15.2 (927.6)
Moment of Inertia: kg m² (lb/in-	4.29 (14660)
Engine Electrical System:	
- Voltage / Grou	und 24/Negative
- Battery Charger An	mps 70
Weight: kg (lb)	Dry 1633 (3600)
- \	Wet 1714 (3779)

Performance		50 Hz	60 Hz
Engine Speed: rpm		1500	-
Gross Engine Powe	er: kW (hp)		
	- Prime	412.0 (553.0)	-
	- Standby	451.0 (605.0)	-
BMEP: kPa (psi)			
	- Prime	2235.0 (316.1)	-
	- Standby	2447.0 (346.0)	-

Fuel System	
Fuel Filter Type:	Replaceable Element
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	101.5 (26.8)	91.3 (24.1)	69.6 (18.4)	49.6 (13.1)
60 Hz	-	-	-	-

	100%	75%	50%
Standby	Load	Load	Load
50 Hz	101.5 (26.8)	76.6 (20.2)	54.0 (14.3)
60 Hz	-	-	-

(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:		Non Ca	nister
Combustion Air Flow: m³/min (cfm)			
	- Prime	25.8 (911)	-
	- Standby	30.5 (1077)	-
Max. Combustion Air Intake Restriction: ${\sf kPa}$ (in ${\sf H}_2{\sf O}$)		6.2 (24.9)	-

Cooling System	50 Hz	60 Hz	
Cooling System Capacity: I (US gal)	58.1 (15.3)	-	
Water Pump Type:	Centr	ifugal	
Heat Rejected to Water & Lube Oil:			
kW (Btu/min) - Prim	e 134.0 (7620)	-	
- Standb	y 147.0 (8360)	-	
Heat Radiation to Room: Heat radiated from engine and alternator			
kW (Btu/min) - Prim	e 49.3 (2804)		
- Standb	y 57.7 (3281)		
Radiator Fan Load: kW (hp)	13.7 (18.4)	-	
Radiator Cooling Airflow: m³/min (cfm)	476.4 (16824)	-	
External Restriction to Cooling Airflow: Pa (in H ₂ O)	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:	Eco, Full Flow
Total Oil Capacity: I (US gal)	62.0 (16.4)
Oil Pan: I (US gal)	53.0 (14.0)
Oil Type:	API CI4 15W-40
Oil Cooling Method:	Water

Exhaust System	50 Hz	60 Hz
Maximum Allowable Back Pressure: kPa (in Hg)	6.8 (2.0)	-
Exhaust Gas Flow: m³/min (cfm)		
- Prime	71.4 (2521)	-
- Standby	81.0 (2860)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	500 (932)	-
- Standby	550 (1022)	-

Alternator Physical Data	
Manufactured for FG Wilson by:	FG Wilson
Model:	EG315-360N
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:	Suppression is in line with European Standard EN61000-6					
Radiant Heat: kW (Btu/min)						
- 50 Hz	26.5 (1507)					
- 60 Hz	-					

Alternator Performance Data:	50 Hz			60 Hz	
Data Item	415/240V	400/230V	380/220V		
		230 V			
Motor Starting	1.420	1220	1007		
Capability* kVA	1439	1339	1207		
Short Circuit	200	200	200		
Capacity** %	300	300	300		
Reactances: Per Unit					
Xd	3.080	3.120	3.283		
X'd	0.105	0.114	0.120		
X"d	0.096	0.103	0.108		

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

**With optional	permanent	magnet	generator	or .	AREP	excitation.

Output Ratings Technical Data 50 Hz					
Voltage	Priı	me:	Standby:		
	kVA	kW	kVA	kW	
415/240V	450.0	360.0	500.0	400.0	
400/230V	450.0	360.0	500.0	400.0	
380/220V	427.5	342.0	491.6	393.3	
230 V	450.0	360.0	500.0	400.0	

Output Ratings Technical Data 60 Hz						
Voltage	Pri	ime:	Standby:			
	kVA	kW	kVA	kW		

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