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## P563-3

Output Ratings		
Voltage, Frequency	Prime	Standby
-	kVA / kW	kVA / kW
480V, 60 Hz	512.5 kVA / 410.0 kW	562.5 kVA / 450.0 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  $25^{\circ}$ 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.

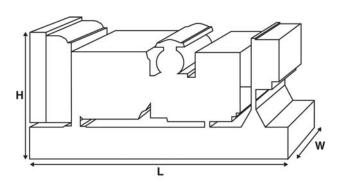




Image for illustration purposes only.

Ratings and Performance Do	ıta		
Engine Make & Model:		Perkins® 250	6A-E15TAG3
Alternator manufactured for FG Wilson by:		FG Wilson	
Alternator Model:		EG315L-360N	I
Control Panel:		PowerWizard 1	.1+
Base Frame:		Heavy Duty Fa	bricated Steel
Circuit Breaker Type:		3 Pole MCCB	
Frequency:		50 Hz	60 Hz
Engine Speed: rpm		-	1800
Fuel Tank Capacity: litres (US gal)		888 (234.6)	
Fuel Consumption: I/hr (US gal/l	hr)		
(100% Load)	- Prime	-	101.6 (26.8)
	- Standby	-	111.3 (29.4)

#### **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)	<b>Dry</b> kg (lb)	<b>Wet</b> 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/in²)	4.29 (14660)
Engine Electrical System:	
- Voltage / Groun	d 24/Negative
- Battery Charger Amp	os 70
Weight: kg (lb) - D	ry 1633 (3600)
- W	et 1714 (3779)

Performance	50 Hz	60 Hz
Engine Speed: rpm	-	1800
Gross Engine Power: kW (hp)		
- Prime	-	469.0 (629.0)
- Standby	-	514.0 (689.0)
BMEP: kPa (psi)		
- Prime	-	2143.0 (299.8)
- Standby	-	2339.0 (328.6)

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	-	-	-	-
60 Hz	111.3 (29.4)	101.6 (26.8)	78.9 (20.8)	59.1 (15.6)

Standby	100% Load	75% Load	50% Load
50 Hz	-	-	-
60 Hz	111.3 (29.4)	85.2 (22.5)	62.9 (16.6)

(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	Canister
Combustion Air Flow: m³/min (cfm)		
- Prime	-	39.0 (1377)
- Standby	-	42.0 (1483)
Max. Combustion Air Intake Restriction: kPa (in H <sub>2</sub> O)	-	6.2 (24.9)

- Centr	60 Hz 58.1 (15.3) ifugal	
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-	158.0 (8985)	
-	158.0 (8985)	
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-	185.0 (10521)	
Heat Radiation to Room: Heat radiated from engine and alternator		
	58.2 (3310)	
	66.6 (3787)	
-	28.0 (37.6)	
-	659.4 (23287)	
-	125 (0.5)	
	- ind alternator - -	

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

Designed to operate in ambient conditions up to  $50^{\circ}$ C ( $122^{\circ}$ F). Contact your local FG Wilson Dealer for power ratings at specific site conditions.

Exhaust System	50 Hz	60 Hz
Maximum Allowable Back Pressure: kPa (in Hg)	-	6.8 (2.0)
Exhaust Gas Flow: m³/min (cfm)		
- Prime	-	96.0 (3390)
- Standby	-	105.3 (3719)
Exhaust Gas Temperature: °C (°F)		
- Prime	-	536 (997)
- Standby	-	590 (1094)

Alternator Physical Data	
Manufactured for FG Wilson by:	FG Wilson
Model:	EG315L-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:	-
Radiant Heat: kW (Btu/min)	
- 50 Hz	-
- 60 Hz	29.1 (1655)

Alternator Performance Data:	50 Hz	60 Hz		
Data Item		480/277V	380/220V	440/254V
Motor Starting		1288	806	1064
Capability* kVA		1200	800	1004
Short Circuit		200	200	200
Capacity** %		300	300	300
Reactances: Per Unit				
Xd		2.960	4.334	3.523
X'd		0.108	0.158	0.129
X"d		0.098	0.143	0.117

Output Ratings Technical Data 50 Hz				
Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW

Output Ratings Technical Data 60 Hz				
Voltage	Prime:		Standby:	
	kVA	kW	kVA	kW
480/277V	512.5	410.0	562.5	450.0
380/220V	470.3	376.2	540.8	432.6
440/254V	512.5	410.0	562.5	450.0

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