

# P660-1

Output Ratings		
Voltage, Frequency	Prime	Standby
400V, 50 Hz	600.0 kVA / 480.0 kW	660.0 kVA / 528.0 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.

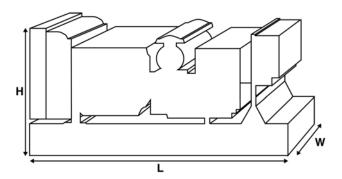
#### **Standby Rating**

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°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, EN590.





# Image for illustration purposes only.

Ratings and Performance Data		
Engine Make & Model:	Perkins 2806A-E	18TAG1A
Alternator manufactured for FG Wilson by:	Leroy Somer	
Alternator Model:	LL7024F	
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)	1132 (2	99.0)
Fuel Consumption: I/hr (US gal/hr)		
(100% Load) - Prim	ne 120.3 (31.8)	-
- Standt	oy 133.1 (35.2)	-

# **Available Options**

FG Wilson offer a range of optional features to tailor our generating sets to meet your power needs. Options include:

- Upgrade to CE Certification
- A wide range of Sound Attenuated Enclosures
- A variety of generating 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 and Weights				
<b>Length</b> (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	<b>Dry</b> kg (lb)	<b>Wet</b> kg (lb)
3900 (153.5)	1461 (57.5)	2156 (84.9)	4264 (9400)	4332 (9550)
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. Generating set pictured may include optional accessories.

Engine Technical Data		
No. of Cylinders / Alignment:		6 / In Line
Cycle:		4 Stroke
Bore / Stroke: mm (in)		145.0 (5.7)/183.0 (7.2)
Induction:		Turbocharged Air To Air Charge Cooled
Cooling Method:	Cooling Method:	
Governing Type:	ning Type: Electronic	
Governing Class:	rning Class: ISO 8528 G2	
Compression Ratio:		14.5:1
Displacement: I (cu. in)		18.1 (1104.5)
Moment of Inertia: kg m <sup>2</sup> (lb/in <sup>2</sup> ) 7.05 (2409		7.05 (24091)
Engine Electrical System	:	
- Voltage / O	Ground	24/Negative
- Battery Charge	r Amps	70
Weight: kg (lb)	- Dry	2050 (4519)
	- Wet	2158 (4758)

Performance		50 Hz	60 Hz
Engine Speed: rpm		1500	-
Gross Engine Power:	kW (hp)		
	- Prime	539.7 (724.0)	-
	- Standby	592.7 (795.0)	-
BMEP: kPa (psi)			
	- Prime	2381.0 (345.4)	-
	- Standby	2615.0 (379.3)	-

F	uel Systen	n			
F	uel Filter Type: Eco Replaceable Element				
R	ecommen	ded Fuel:	: Class A2 Diesel, BSEN590		
F	uel Consu	mption: I/hr (US g	gal/hr)		
		110%	100%	75%	50%
	Prime	Load	Load	Load	Load
	50 Hz	133.1 (35.2)	120.3 (31.8)	89.9 (23.7)	61.6 (16.3)
	60 Hz	-	-	-	-
			100%	75%	50%
	Standby		Load	Load	Load
	50 Hz		133.1 (35.2)	98.8 (26.1)	67.1 (17.7)
	60 Hz		-	-	-
_		14 1 11			5000 (0

(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 Car	nister
Combustion Air Flow: m <sup>3</sup> /min (cfm)		
- Prime	34.0 (1201)	-
- Standby	36.0 (1271)	-
Max. Combustion Air Intate Restriction: kPa (in H <sub>2</sub> O)	6.4 (25.7)	-

Cooling System	50 Hz	60 Hz
Cooling System Capacity: I (US gal)	68.5 (18.1)	-
Water Pump Type:	Centr	rifugal
Heat Rejected to Water & Lube Oil:		
kW (Btu/min) - Pri	me 208.0 (11829)	-
- Stand	<b>dby</b> 222.0 (12625)	-
Heat Radiation to Room: Heat radiated t	from engine and alternator	r
kW (Btu/min) - Pri	me 71.9 (4089)	
- Stand	<b>dby</b> 81.3 (4623)	
Radiator Fan Load: kW (hp)	9.0 (12.1)	-
Radiator Cooling Airflow: m <sup>3</sup> /min (cfm)	373.2 (13179)	-
External Restriction to Cooling Airflow: Pa (in H <sub>2</sub> 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 CH4 / CI4
Oil Cooling Method:	Water
	- , -

Exhaust System	50 Hz	60 Hz
Maximum Allowable Back Pressure: <sup>kPa</sup> (in Hg)	6.9 (2.0)	-
Exhaust Gas Flow: m <sup>3</sup> /min (cfm)		
- Prime	96.0 (3390)	-
- Standby	104.0 (3673)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	568 (1054)	-
- Standby	571 (1060)	-

Alternator Physical Data	
Manufactured for FG Wilson by:	Leroy Somer
Model:	LL7024F
No. of Bearings:	1
Insulation Class:	Н
Winding Pitch Code:	2/3 - 6S
Wires:	6
Ingress Protection Rating:	IP23
Excitation System:	AREP
AVR Model:	R450M

Alternator Operating Data	
Overspeed: rpm	2250
Voltage Reguation: (Steady state)	+/- 0.5%
Wave Form NEMA = TIF:	50
Wave Form IEC = THF:	2.0%
Total Harmonic content LL/LN:	4.0%
Radio Interference:	Suppression is in line with European Standard EN61000-6
Radiant Heat: kW (Btu/min)	
- 50 Hz	39.3 (2235)
- 60 Hz	-

Alternator Performance Data:		50	Hz	60 Hz			
Data Item	415/240V	400/230V	380/220V				
Motor Starting Capability* kVA	1475	1376	1249				
Short Circuit Capacity** %	300	300	300				
Reactances: Per Unit							
Xd	3.083	3.319	3.555				
X'd	0.160	0.173	0.185				
X"d	0.127	0.137	0.147				

Reactances shown are applicable to prime ratings. \*Based on 30% voltage dip at 0.6 power factor and AREP excitation system. \*\*With optional permanent magnet generator or AREP excitation.

Voltage Technical Data 50 Hz					Voltage Technical Data 60 Hz				
Voltage	Prime:		Standby:		Voltage	Pr	ime:	Standby	
	kVA	kW	kVA	kW		kVA	kW	kVA	
415/240V	600.0	480.0	660.0	528.0					
400/230V	600.0	480.0	660.0	528.0					
380/220V	580.0	464.0	638.0	510.4					

# Documentation

A full set of operation and maintenance manuals and circuit wiring diagrams.

### **Generating 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: