



www.FGWilson.com

P660-1



Image for illustration purposes only.

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.

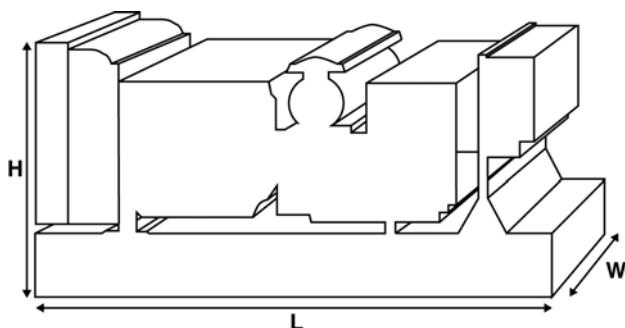
Standby Rating

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.



Ratings and Performance Data

Engine Make & Model:	Perkins® 2806A-E18TAG1A	
Alternator manufactured for FG Wilson by:	Leroy Somer	
Alternator Model:	LL7024F	
Control Panel:	PowerWizard 1.1+	
Base Frame:	Heavy Duty Fabricated Steel	
Circuit Breaker Type:	3 Pole MCCB	
Frequency:	50 Hz	60 Hz
Engine Speed: RPM	1500	-
Fuel Tank Capacity: litres (US gal)	1132 (299.0)	
Fuel Consumption: l/hr (US gal/hr)		
(100% Load)	- Prime	120.3 (31.8)
	- Standby	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

Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	Dry kg (lb)	Wet 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:	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 m ² (lb/in ²)	7.05 (24091)
Engine Electrical System:	
- Voltage / Ground	24/Negative
- Battery Charger 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)	-

Fuel System					
Fuel Filter Type: Eco Replaceable Element					
Recommended Fuel: Class A2 Diesel, BSEN590					
Fuel Consumption: l/hr (US gal/hr)					
Prime	110% Load	100% Load	75% Load	50% Load	
50 Hz	133.1 (35.2)	120.3 (31.8)	89.9 (23.7)	61.6 (16.3)	
60 Hz	-	-	-	-	
Standby	100% Load	75% Load	50% Load		
50 Hz	133.1 (35.2)	98.8 (26.1)	67.1 (17.7)		
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 Canister	
Combustion Air Flow: m ³ /min (cfm)			
- Prime		34.0 (1201)	-
- Standby		36.0 (1271)	-
Max. Combustion Air Intake Restriction: kPa (in H ₂ O)		6.4 (25.7)	-

Cooling System	50 Hz	60 Hz
Cooling System Capacity: l (US gal)	68.5 (18.1)	-
Water Pump Type:	Centrifugal	
Heat Rejected to Water & Lube Oil:		
kW (Btu/min)	- Prime 208.0 (11829)	-
	- Standby 222.0 (12625)	-
Heat Radiation to Room: Heat radiated from engine and alternator		
kW (Btu/min)	- Prime 71.9 (4089)	-
	- Standby 81.3 (4623)	-
Radiator Fan Load: kW (hp)	9.0 (12.1)	-
Radiator Cooling Airflow: m ³ /min (cfm)	373.2 (13179)	-
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	50 Hz	60 Hz
Oil Filter Type:	Eco, Full Flow	
Total Oil Capacity: l (US gal)	62.0 (16.4)	
Oil Pan: l (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: kPa (in Hg)	6.9 (2.0)	-
Exhaust Gas Flow: m ³ /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:	H
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 Regulation: (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					
	1475	1376	1249					
	300	300	300					
	X _d	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.

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



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.