

P605-1

Output Ratings		
Voltage, Frequency	Prime	Standby
400V, 50 Hz	550.0 kVA / 440.0 kW	605.0 kVA / 484.0 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.

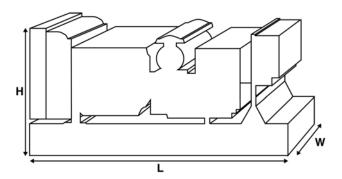




Image for illustration purposes only.

Ratings and Performance Data				
Engine Make & Model:	Perkins® 2806A-E18TAG1			
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: I/hr (US gal/hr)				
(100% Load) - P	rime 108.0 (28.5) -			
- Sta	ndby 119.3 (31.5) -			

## **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	e 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: I (cu. in)		18.1 (1104.5)		
Moment of Inertia: kg m <sup>2</sup> (Ib/in <sup>2</sup> )		7.44 (25424)		
Engine Electrical System	:			
- Voltage / Ground		24/Negative		
- Battery Charge	r Amps	70		
Weight: kg (lb)	- Dry	2050 (4519)		
	- Wet	2158 (4758)		

Air Systems	50 Hz	60 Hz
Air Filter Type:	Non C	Canister
Combustion Air Flow: m <sup>3</sup> /min (cfm)		
- Prin	ne 37.0 (1307)	-
- Stand	<b>by</b> 40.0 (1413)	-
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: 1 (US	S gal)	68.5 (18.1)	-
Water Pump Type:		Centrif	ugal
Heat Rejected to Water & Lu	be Oil:		
kW (Btu/min)	- Prime	185.0 (10521)	-
	- Standby	190.9 (10856)	-
Heat Radiation to Room: Heat	t radiated from	engine and alternator	
kW (Btu/min)	- Prime	70.9 (4032)	
	- Standby	73.5 (4180)	
Radiator Fan Load: kW (hp)		9.0 (12.1)	-
Radiator Cooling Airflow: m³/r	nin (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)	55.5 (14.7)
Oil Pan: I (US gal)	53.5 (14.1)
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	88.0 (3108)	-
- Standby	95.3 (3365)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	521 (969)	-
- Standby	523 (974)	-

Performance		50 Hz	60 Hz
Engine Speed: rpm	ı	1500	-
Gross Engine Pow	<b>ver:</b> kW (hp)		
	- Prime	495.0 (664.0)	-
	- Standby	544.0 (730.0)	-
BMEP: kPa (psi)			
	- Prime	2184.0 (316.8)	-
	- Standby	2400.0 (348.1)	-

F	Fuel System					
F	uel Filter 1	Гуре:	E	Eco Replaceable Element		
Recommended Fuel: Class A2 Diesel, BSEN590				BSEN590		
F	uel Consu	mption: I/hr (US g	al/hr)			
		110%	100%	75%	50%	
	Prime	Load	Load	Load	Load	
	50 Hz	119.3 (31.5)	108.0 (28.5)	81.5 (21.5)	57.8 (15.3)	
	60 Hz	-	-	-	-	
			100%	75%	50%	
	Standby		Load	Load	Load	
	50 Hz		119.3 (31.5)	89.2 (23.6)	62.3 (16.5)	
	60 Hz		-	-	-	

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

Alternator Physical Data			
Manufactured for FG Wilson by:	Leroy Somer		
Model:	LL7024F		
No. of Bearings:	1		
Insulation Class:	Н		
Winding Pitch Code:	2/3 - 6		
Wires:	12		
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	34.3 (1951)			
- 60 Hz	-			

Alternator Performance Data:		50 Hz			60 H
Data Item	415/240V	400/230V	380/220V		
Mater Starting					
Motor Starting	1475	1376	1249		
Capability* kVA					
Short Circuit	200	200	200		
Capacity** %	300	300	300		
Reactances: Per Unit					
Xd	2.826	3.042	3.370		
X'd	0.147	0.158	0.175		
X"d	0.117	0.125	0.139		

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					Output Ratings Technical Data 60 Hz						
Voltage	Prime:		Standby:		Voltage	Prime:		Standby			
	kVA	kW	kVA	kW		kVA	kW	kVA			
415/240V	550.0	440.0	605.0	484.0							
400/230V	550.0	440.0	605.0	484.0							
380/220V	550.0	440.0	605.0	484.0							
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## Documentation

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

### **G**enerating 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.