

P700-1

Output Ratings		
Voltage, Frequency	Prime	Standby
400V, 50 Hz	635.0 kVA / 508.0 kW	700.0 kVA / 560.0 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.

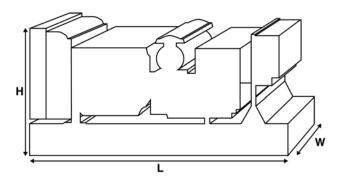




Image for illustration purposes only.

Ratings and Performance Data		
Engine Make & Model:	Perkins® 2806A-E	18TAG2
Alternator manufactured for FG Wilson by:	Leroy Somer	
Alternator Model:	LL7024H	
Control Panel:	PowerWizard 1.1+	-
Base Frame:	Heavy Duty Fabric	ated Steel
Circuit Breaker Type:	3 Pole MCCB	
Frequency:	50 Hz	60 Hz
Engine Speed: RPM	1500	-
Fuel Tank Capacity: litres (US gal)	1132 (29	99.0)
Fuel Consumption: I/hr (US gal/hr)		
(100% Load) - Prim	e 125.6 (33.2)	-
- Standb	y 139.9 (37.0)	-

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	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 m² (Ib/in²)		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)	

Air Systems	50 Hz	60 Hz
Air Filter Type:	Non Co	inister
Combustion Air Flow: m ³ /min (cfm)		
- Prime	9 37.0 (1307)	-
- Standby	40.0 (1413)	-
Max. Combustion Air Intate Restriction: kPg (in HaQ)	6.4 (25.7)	_

 $\textbf{Restriction: } \texttt{kPa} (\texttt{in } \texttt{H}_2 \texttt{O})$

Cooling System		50 Hz	60 Hz
Cooling System Capacity: I (US	gal)	68.5 (18.1)	-
Water Pump Type:		Centrif	ugal
Heat Rejected to Water & Lub	e Oil:		
kW (Btu/min)	- Prime	202.0 (11488)	-
	- Standby	219.0 (12454)	-
Heat Radiation to Room: Heat	radiated from e	engine and alternator	
kW (Btu/min)	- Prime	72.9 (4146)	
	- Standby	81.6 (4641)	
Radiator Fan Load: kW (hp)		9.0 (12.1)	-
Radiator Cooling Airflow: m³/mi	in (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.

Eco, Full Flow
62.0 (16.4)
53.0 (14.0)
API CH4 / CI4
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	106.0 (3743)	-
- Standby	114.0 (4026)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	555 (1031)	-
- Standby	553 (1027)	-

	50 Hz	60 Hz
	1500	-
r: kW (hp)		
- Prime	584.0 (783.0)	-
- Standby	628.0 (842.0)	-
- Prime	2577.0 (373.7)	-
- Standby	2771.0 (401.9)	-
	- Prime - Standby - Prime	1500 r: kW (hp) - Prime 584.0 (783.0) - Standby 628.0 (842.0) - Prime 2577.0 (373.7)

uel System	ı			
Fuel Filter T	ter Type: Eco Replaceable Element			
Recommen	ded Fuel:	C	Class A2 Diesel, I	BSEN590
Fuel Consu	mption: l/hr (US g	al/hr)		
	110%	100%	75%	50%
Prime	Load	Load	Load	Load
50 Hz	139.9 (37.0)	125.6 (33.2)	93.3 (24.6)	65.1 (17.2)
60 Hz	-	-	-	-
		100%	75%	50%
Standby		Load	Load	Load
50 Hz		139.9 (37.0)	102.8 (27.2)	70.6 (18.7)
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:	LL7024H
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	36.6 (2081)
- 60 Hz	-

Alternator Performance Data:		50	Hz		60 H
Data Item	415/240V	400/230V	380/220V		
Motor Starting	1694	1580	1434		
Capability* kVA					
Short Circuit Capacity** %	300	300	300		
Reactances: Per Unit					
Xd	3.070	3.300	3.660		
X'd	0.160	0.170	0.190		
X"d	0.125	0.135	0.149		

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 Rating	s Technical Do	ata SU Hz			Output Ratings Technical Data 60 Hz						
Voltage	Prime:		Standby:		Voltage	Prime:		Standby			
	kVA	kW	kVA	kW		kVA	kW	kVA			
415/240V	635.0	508.0	700.0	560.0							
400/230V	635.0	508.0	700.0	560.0							
380/220V	635.0	508.0	700.0	560.0							

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. In line with our policy of continuous product development, we reserve the right to change specification without notice.