



# P1700P1/P1875E1

Output Ratings		
Voltage, Frequency	Prime	Standby
400V, 50 Hz	1700.0 kVA / 1360.0 kW	1875.0 kVA / 1500.0 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.

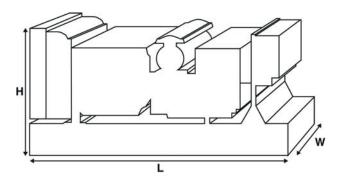
#### Standby Rating

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.



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Image	tor	illustration	purposes	only.

Ratings and Performance Data				
Engine Make & Model:	Perkins® 4012-	-46TAG3A		
Alternator manufactured for FG Wilson by:	Leroy Somer			
Alternator Model:	LL9324F			
Control Panel:	PowerWizard 1.1	1+		
Base Frame:	Heavy Duty Fab	ricated Steel		
Circuit Breaker Type:	3 Pole ACB-Opt	ion		
Frequency:	50 Hz	60 Hz		
Engine Speed: rpm	1500	-		
Fuel Tank Capacity: litres (US gal)	-	-		
Fuel Consumption: I/hr (US gal/hr)				
(100% Load)	- Prime 349.7 (92.4)	-		
- 5	Standby 390.2 (103.1)	-		

# 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 and Weights				
Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	<b>Dry</b> kg (lb)	<b>Wet</b> kg (lb)
5259 (207.0)	2192 (86.3)	2453 (96.6)	10997 (24244)	11207 (24707)
Dry = With Lube Oil		Wet = With Lub	e 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:	12 / Vee		
Cycle:	4 Stroke		
Bore / Stroke: mm (in)	160.0 (6.3)/190.0 (7.5)		
Induction:	Turbocharged Air To Air		
	Charge Cooled		
Cooling Method:	Water		
Governing Type:	Electronic		
Governing Class:	ISO 8528		
Compression Ratio:	13.0:1		
Displacement: I (cu. in)	45.8 (2794.9)		
Moment of Inertia: kg m <sup>2</sup> (Ib/in <sup>2</sup> )	19.30 (65951)		
Engine Electrical System:			
- Voltage / Ground	24/Negative		
- Battery Charger Amps	40		
Weight: kg (lb) - Dry	4400 (9700)		
- Wet	4604 (10150)		

Air Systems		50 Hz	60 Hz
Air Filter Type:		Replaceable	Element
Combustion Air Flow: m <sup>3</sup> /min (cfr	n)		
	- Prime	125.0 (4414)	-
	- Standby	135.0 (4767)	-
Max. Combustion Air Intake Restriction: kPa (in H <sub>2</sub> O)		4.0 (16.1)	-

Cooling System	50 Hz	60 Hz
Cooling System Capacity: I (US g	al) 207.0 (54.	.7) -
Water Pump Type:	C	Centrifugal
Heat Rejected to Water & Lube	Oil:	
kW (Btu/min)	- Prime 510.0 (290	03) -
-	Standby 625.0 (355	43) -
Heat Radiation to Room: Heat ra	diated from engine and alter	rnator
kW (Btu/min)	- Prime 164.5 (935	55)
-	Standby 185.7 (105	61)
Radiator Fan Load: kW (hp)	64.0 (85.)	8) -
Radiator Cooling Airflow: m³/mir	(cfm) 1920.0 (678	04) -
External Restriction to Cooling Airflow: Pa (in H <sub>2</sub> O)	250 (1.0	) -

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:	Spin-On, Full Flow
Total Oil Capacity: I (US gal)	177.0 (46.8)
Oil Pan: I (US gal)	159.0 (42.0)
Oil Type:	API CH4 15W-40
Oil Cooling Method:	Water

Exhaust System	50 Hz	60 Hz
Maximum Allowable Back Pressure: <sup>kPa</sup> (in Hg)	5.0 (1.5)	-
Exhaust Gas Flow: m³/min (cfm)		
- Prime	350.0 (12360)	-
- Standby	350.0 (12360)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	480 (896)	-
- Standby	480 (896)	-

Performance		50 Hz	60 Hz
Engine Speed: rpm		1500	-
Gross Engine Pow	er: kW (hp)		
	- Prime	1500.0 (2012.0)	-
	- Standby	1643.0 (2203.0)	-
BMEP: kPa (psi)			
	- Prime	2618.0 (379.7)	-
	- Standby	2868.0 (415.9)	-

F	uel Systen	n			
F	uel Filter <sup>-</sup>	Гуре:	R	eplaceable Eler	nent
R	ecommen	ded Fuel:	C	lass A2 Diesel c	or BSEN590
F	uel Consu	mption: I/hr (US g	al/hr)		
		110%	100%	75%	50%
	Prime	Load	Load	Load	Load
	50 Hz	390.2 (103.1)	349.7 (92.4)	259.9 (68.7)	182.5 (48.2)
	60 Hz	-	-	-	-
			100%	75%	50%
	Standby		Load	Load	Load
	50 Hz		390.2 (103.1)	286.4 (75.7)	197.5 (52.2)
	60 Hz		-	-	-
			-	- and conforming t	- - R\$2960

(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:	LL9324F
No. of Bearings:	1
Insulation Class:	Н
Winding Pitch Code:	2/3 - 6S
Wires:	6
Ingress Protection Rating:	IP23
Excitation System:	AREP
AVR Model:	R449

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:	3.5%						
Radio Interference:	Suppression is in line with European Standard EN61000-6						
Radiant Heat: kW (Btu/min)							
- 50 Hz	62.7 (3566)						
- 60 Hz	-						

Alternator Performance Data:		50	Hz	60 Hz
Data Item	415/240V	400/230V	380/220V	
Motor Starting Capability* kVA	5086	4740	4295	
Short Circuit Capacity** %	300	300	300	
Reactances: Per Unit				
Xd	3.119	3.358	3.720	
X'd	0.247	0.266	0.294	
X"d	0.127	0.137	0.152	

Reactances shown are applicable to prime ratings. \*Based on 30% voltage dip at 0.4 power factor. \*\*With optional permanent magnet generator.

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	1700.0	1360.0	1875.0	1500.0					
400/230V	1700.0	1360.0	1875.0	1500.0					
380/220V	1700.0	1360.0	1875.0	1500.0					

#### 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 with unlimited hours or two year manufacturer's warranty limited to 6,000 running hours. Standby equipment, limited to 500 running hours per year, has a three year manufacturer's warranty.

# 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.