

# P1700P1/P1875E1

Output Ratings		
Voltage, Frequency	Prime	Standby
380-415V,50Hz	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.

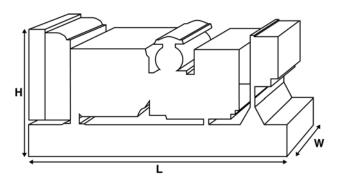
#### **Standby Rating**

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.





# Image for illustration purposes only.

Ratings and Performance Data		
Engine Make & Model:	Perkins <sup>®</sup> 4012-46	TAG3A
Alternator manufactured for FG Wilson by:	Leroy Somer	
Alternator Model:	LL9224F	
Control Panel:	PowerWizard 1.1+	÷
Base Frame:	Heavy Duty Fabric	cated 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) - Prir	me 351.5 (92.9)	-
- Stand	by 392.6 (103.7)	-

## **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 an	nd Weights			
Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	<b>Dry</b> kg (lb)	<b>Wet</b> kg (lb)
5101 (200.8)	2192 (86.3)	2453 (96.6)	11576 (25521)	11783 (25977)
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 G2	
Compression Ratio:	13.0:1	
Displacement: I (cu. in)	45.8 (2794.9)	
Moment of Inertia: kg m² (lb/in²)	19.30 (65951)	
Engine Electrical System:		
- Voltage / Ground	24/Negative	
- Battery Charger Amps	40	
Weight: kg (lb) - Dry	4400 (9700)	
- Wet	4604 (10150)	

Performance		50 Hz	60 Hz
Engine Speed: rpm		1500	-
Gross Engine Powe	<b>r:</b> 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)	-

Fuel Syster	m			
Fuel Filter Type: Replaceable Element				
Recommen	nded Fuel:	C	lass A2 Diesel c	r BSEN590
Fuel Consu	umption: I/hr (US g	jal/hr)		
	110%	100%	75%	50%
Prime	Load	Load	Load	Load
50 Hz	392.6 (103.7)	351.5 (92.9)	261.0 (68.9)	183.1 (48.4)
60 Hz	-	-	-	-
		100%	75%	50%
Store dly	M.	Load	Load	Load
Standb	/	Eodd		
50 Hz			287.6 (76.0)	198.1 (52.3)

(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:	Replaceable	Element
Combustion Air Flow: m <sup>3</sup> /min (cfm)		
- 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 gal)	207.0 (54.7)	-
Water Pump Type:	Centr	rifugal
Heat Rejected to Water & Lube C	Dil:	
kW (Btu/min)	Prime 510.0 (29003)	-
- S	tandby 625.0 (35543)	-
Heat Radiation to Room: Heat radi	ated from engine and alternator	r
kW (Btu/min)	Prime 171.4 (9747)	
- S	tandby 194.0 (11033)	
Radiator Fan Load: kW (hp)	64.0 (85.8)	-
Radiator Cooling Airflow: m³/min (	<sup>cfm)</sup> 1920.0 (67804)	-
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
Silencer Type:	Indust	rial
Silencer Model & Quantity:	IND-Opti	on (1)
Pressure Drop Across Silencer System: kPa (in Hg)	3.70 (1.093)	-
Silencer Noise Reduction Level: dB	13.5	-
<b>Maximum Allowable Back Pressure:</b> <sup>kPa</sup> (in Hg)	5.0 (1.5)	-
Exhaust Gas Flow: m <sup>3</sup> /min (cfm)		
- Prime	<b>350.0 (12360)</b>	-
- Standby	/ 350.0 (12360)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	<b>480 (896)</b>	-
- Standby	480 (896)	-

Alternator Physical Data	
Manufactured for FG Wilson by:	Leroy Somer
Model:	LL9224F
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	71.0 (4038)
- 60 Hz	-

Alternator Performance Data:		50	Hz	60 Hz			
Data Item	415/240V	400/230V	380/220V				
Motor Starting Capability* kVA	4683	4364	3955				
Short Circuit Capacity** %	300	300	300				
Reactances: Per Unit							
Xd	3.119	3.358	3.720				
X'd	0.241	0.259	0.287				
X"d	0.124	0.134	0.148				

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. 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.