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# P1250P3/P1375E3

Output Ratings		
Voltage, Frequency	Prime*	Standby*
400V, 50 Hz	1250.0 kVA / 1000.0 kW	1375.0 kVA / 1100.0 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.

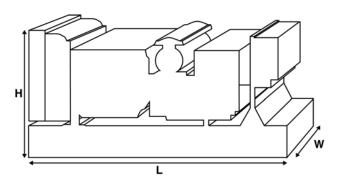


Image for illustration purposes only.

Ratings and Performance Data	ı		
Engine Make & Model:		Perkins® 4012-46	TWG2A
Alternator manufactured for FG Wilson by:		Leroy Somer	
Alternator Model:		LL8224H	
Control Panel:		PowerWizard 1.1	+
Base Frame:		Heavy Duty Fabri	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)	- Prime	258.0 (68.2)	-
-	Standby	284.9 (75.3)	-

#### **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 an	d Weights			
Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	<b>Dry</b> kg (lb)	<b>Wet</b> kg (lb)
4788 (188.5)	1895 (74.6)	2450 (96.5)	8883 (19584)	9079 (20016)
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. Generating set pictured may include optional accessories.

Engine Technical Data		
No. of Cylinders / Alignm	nent:	12 / Vee
Cycle:		4 Stroke
Bore / Stroke: mm (in)		160.0 (6.3)/190.0 (7.5)
Induction:		Turbocharged
Cooling Method:		Water
Governing Type:		Electronic
Governing Class:		ISO 8528 G2
Compression Ratio:		13.1:1
Displacement: I (cu. in)		45.8 (2797.5)
Moment of Inertia: kg m²	(lb/in²)	19.30 (65951)
Engine Electrical System	:	
- Voltage / G	Ground	24/Negative
- Battery Charge	r Amps	40
Weight: kg (lb)	- Dry	4440 (9788)
	- Wet	4604 (10150)

Performance		50 Hz	60 Hz
Engine Speed: rpm		1500	-
Gross Engine Power:	kW (hp)		
	- Prime	1106.0 (1483.0	-
	- Standby	1217.0 (1632.0	-
BMEP: kPa (psi)			
	- Prime	1930.0 (279.9)	-
	- Standby	2124.0 (308.0)	-

## Fuel System

Fuel Filter Type:Replaceable ElementRecommended Fuel:Class A2 Diesel

Fuel Consumption: I/hr (US gal/hr)

	110%	100%	75%	50%
Prime	Load	Load	Load	Load
50 Hz	284.9 (75.3)	258.0 (68.2)	197.0 (52.0)	145.0 (38.3)
60 Hz	-	-	-	-

	110%	100%	75%	50%
Standby	Load	Load	Load	Load
50 Hz		284.9 (75.3)	214.4 (56.6)	154.7 (40.9)
60 Hz		-	-	-

(Based on diesel fuel with a specific gravity of 0.84 and conforming to BS2869, Class A2)  $\,$ 

Replaceabl	e Element
ne 102.0 (3602)	-
by 109.0 (3849)	-
3.7 (14.9)	-
	ne 102.0 (3602) py 109.0 (3849)

Cooling System	50 Hz	60 Hz
Cooling System Capacity: I (US gal)	196.0 (51.8)	-
Water Pump Type:	Centr	ifugal
Heat Rejected to Water & Lube Oil:		
kW (Btu/min) - P	rime 372.0 (21155)	-
- Stai	ndby 401.0 (22804)	-
Heat Radiation to Room: Heat radiated	from engine and alternator	
kW (Btu/min) - P	rime 132.7 (7547)	-
- Stai	ndby 148.5 (8445)	-
Radiator Fan Load: kW (hp)	32.0 (42.9)	-
Radiator Cooling Airflow: m³/min (cfm)	1116.0 (39411)	-
External Restriction to Cooling Airflow: Pa (in H <sub>2</sub> O)	250 (1.0)	-

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

Cooling system designed to operate in ambient conditions up to  $50^{\circ}$ C ( $122^{\circ}$ F). Contact your local FG Wilson Dealer for power ratings at specific site conditions.

Exhaust System	50 Hz	60 Hz
Silencer Type:	Indus	trial
Silencer Model & Quantity:	IND-Opt	ion (1)
Pressure Drop Across Silencer System: kPa (in Hg)	2.30 (0.679)	-
Silencer Noise Reduction Level: dB	13.2	-
Maximum Allowable Back Pressure: kPa (in Hg)	5.0 (1.5)	-
Exhaust Gas Flow: m³/min (cfm)		
- Prime	230.0 (8122)	-
- Standby	230.0 (8122)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	422 (792)	-
- Standby	422 (792)	-

Alternator Physical Data	
Manufactured for FG Wilson by:	Leroy Somer
Model:	LL8224H
No. of Bearings:	1
Insulation Class:	Н
Winding Pitch Code:	2/3 - 6\$
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:	3.5%
Radio Interference:	Suppression is in line with European Standard EN61000-6
Radiant Heat: kW (Btu/min)	
- 50 Hz	59.5 (3384)
- 60 Hz	-

Alternator Performance Data:	50 Hz			
Data Item	415/240V	400/230V	380/220V	
Motor Starting				
Capability* kVA	3093	2883	2613	
Short Circuit	200	200	200	
Capacity** %	300	300	300	
Reactances: Per Unit				
Xd	3.560	3.840	4.250	
X'd	0.250	0.270	0.290	
X"d	0.138	0.148	0.164	

Reactances shown are applicable to prime ratings.

\*Based on 30% voltage dip at 0.6 power factor.

\*\*With optional permanent magnet generator or AREP excitation.

Output Ratings Technical Data 50 Hz					
Voltage	Pri	me:	Standby:		
	kVA	kW	kVA	kW	
415/240V	1250.0	1000.0	1375.0	1100.0	
400/230V	1250.0	1000.0	1375.0	1100.0	
380/220V	1250.0	1000.0	1375.0	1100.0	

Voltage	Pri	ime:	Standby:	
	kVA	kW	kVA	kW

Documentation
A full set of operation and maintenance manuals and circuit wiring diagrams.
Consensation Set Standards
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.
To Wison is a runy accreance 130 7001 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:
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.

**General Information**