

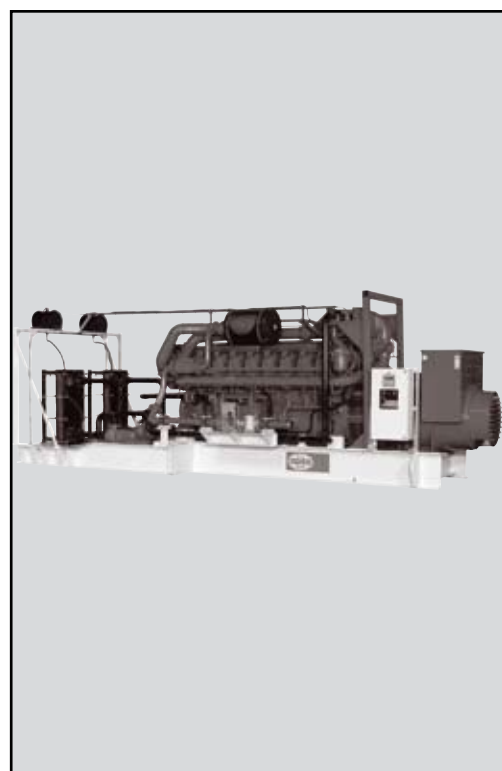
PG1250B



Output Ratings	
Generating Set Model	PG1250B Baseload*
380-415V, 50 Hz	1250 kVA 1000 kW

* Refer to ratings definitions on page 4.
Ratings at 0.8 pf

Technical Data	
Engine Make & Model	Perkins 4016-E61TRS
Alternator Model	LL8124P
Base Frame Type	Heavy Duty Fabricated Steel
Circuit Breaker Type/Rating	3 Pole MCCB
Frequency	50 Hz
Engine Speed RPM	1500
Fuel Consumption m ³ /hr (cfh)	273 (9599)



Weights & Dimensions

Weight: kg (lb)		Dimensions: mm (in)	
Wet (+ lube oil & coolant)	13000 (28665)	Length	6767 (266)
		Width	2100 (86.61)
		Height	2750 (108)



FG Wilson has manufacturing facilities 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



Engine Technical Data

Physical Data		Air System	
Manufacturer:	Perkins	Air Filter Type:	Replaceable Element
Model:	4016E-61TRS	Combustion Air Flow:	
No. of Cylinders/Alignment:	16V	m ³ /min (cfm)	79.8 (2818)
Cycle:	4 Stroke	Max. Combustion Air Intake	
Induction:	TurboCharged	Restriction: kPa (in H ₂ O)	5.9 (23.2)
Cooling Method:	Water	Radiator Cooling Airflow:	
Governing Type:	Electronic	m ³ /min (cfm)	1260 (44490)
Class:	ISO 8528 G2	External Restriction to	
Compression Ratio:	12.0:1	Cooling Airflow: Pa (in Wg)	125 (0.5)
Displacement: l (cu.in)	61.12 (3736)	Cooling System	
Bore/Stroke: mm (in)	160 (6.3) / 190 (7.5)	Cooling System	
Moment of Inertia: kg m ² (lb/in ²)		Capacity: l (US gal)	168 (44.4)
Engine Electrical System:		Water Pump Type:	Separate, Electric
-Voltage/Ground	24/Negative	Heat Rejected to Water &	
-Battery Charger Amps	32	Lube Oil: kW (Btu/min)	548 (31170)
Weight: kg (lb) -Dry	5600 (12348)	Heat Radiation to Room:	
-Wet	5850 (12899)	kW (Btu/min)	49.0 (2787)
Performance		Heat Rejected to Charge Cooler:	
Engine Speed: rpm	1500	kW (Btu/min)	93.0 (5290)
Gross Engine Power: kW (hp)	1042 (1397)	Radiator Fan Load:	Electric
BMEP: kPa (psi)	1375 (199)	Lubrication System	
Fuel System		Oil Filter Type:	Spin-On, Full Flow
Fuel Filter Type:		Total Oil Capacity l (US gal):	286 (75.6)
Recommended Fuel:	Natural gas with lower calorific value of 34.71MJ/m ³ and minimum methane number of 75	Oil Pan l (US gal):	257 (67.9)
Fuel Consumption m ³ /hr (cfh)		Oil Type:	API-CG4
100% Load		Cooling Method:	Water
273 (9599)		Exhaust System	
Fuel consumption varies widely within each gas type stated. This is because these gases are available (naturally or produced) with variances in their physical properties.		Silencer Type:	Level 1
		Silencer Model & Qty:	SD300
		Pressure Drop Across Silencer System: kPa (in Hg)	TBA
		Silencer Noise Reduction Level: dBA	15
		Max. Allowable Back Pressure: kPa (in Hg)	5.3 (1.57)
		Exhaust Gas Flow: m ³ /min (cfm)	212 (7486)
		Exhaust Gas Temperature: °C (°F)	497 (927)
		Heat Rejected to Exhaust System: kW (Btu/min)	673 (38280)

Alternator Performance Data

Data Item	50 Hz		
	415/240	400/230	380/220
Motor Starting Capability* kVA	4637	4321	3915
Short Circuit Capacity**%	300	300	300
Reactances: Per Unit			
X_d	3.02	3.25	3.6
X'_d	0.2	0.22	0.24
X''_d	0.111	0.121	0.134

Reactances shown are applicable to baseload ratings.

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

** With optional Permanent Magnet generator or AREP excitation.

Alternator Technical Data

Physical Data		Operating Data	
Manufacturer:	FG Wilson	Overspeed: RPM	2250
Model:	LL8124P	Voltage Regulation: (steady state)	±0.5%
No. of Bearings:	Single	Wave Form NEMA = TIF:	<50
Insulation Class:	H	Wave Form IEC = THF:	<2%
Winding Pitch (Code):	2/3 (No.6S)	Total Harmonic Content LL/LN:	<3.5%
Wires:	6	Radio Interference:	Suppression is in line with European Standard EN61000
Ingress Protection Rating:	IP23	Radiant Heat: kW (Btu/min)	55 (3149)
Excitation System:	AREP		
AVR Model:	R449		

Technical Data

3 Phase Ratings and Performance at 50 Hz, 1500 RPM

Voltage	Model: PG1250B Baseload	
	kVA	kW
415/240	1250	1000
400/230	1250	1000
380/220	1250	1000

Definitions

Baseload (Continuous) Rating

These ratings are applicable for supplying continuous electrical power for full load operations. There is no overload available. The ratings represent the engine performance in accordance with ISO 3046 at reference conditions equivalent to those specified in ISO 3046/1 based on the use of natural gas having a lower calorific value of 34.71MJ/m³

Standard Reference Conditions

Note: Standard reference conditions 25°C (77°F) Air Inlet Temp, 100m (328ft) A.S.L. 30% relative humidity. All engine performance data based on the above mentioned maximum continuous ratings. Fuel consumption data at full load using gas fuel with a lower calorific value of 34.71MJ/m³.

General Data

Documents

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 equipment carries full manufacturer's warranty. Extended warranty terms available. For details on warranty cover please contact your local dealer, or visit our website: www.FGWilson.com

