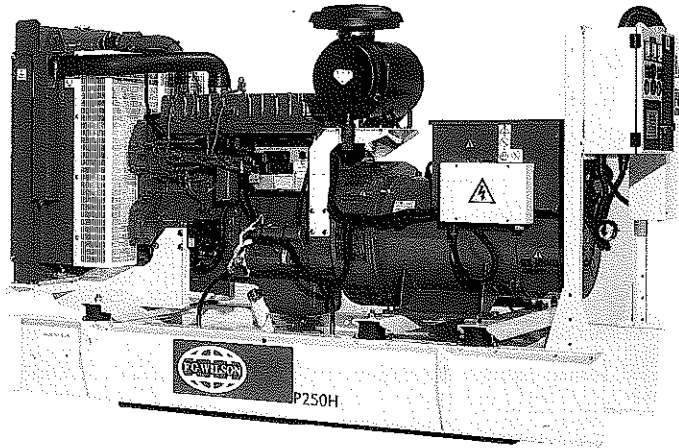
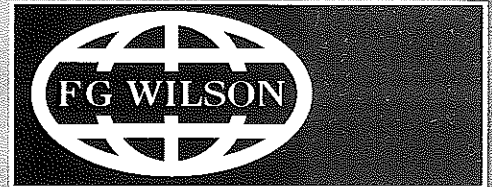


P250H / P275HE



Output Ratings		
Generating Set Model	P250H Prime*	P275HE Standby*
380-415V, 50 Hz	250 kVA 200 kW	275 kVA 220 kW
480V, 60 Hz	n/a n/a	n/a n/a

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

Technical Data		
Engine Make & Model	Perkins 1306-E87TA330	
Alternator Model	LL5014J	
Base Frame Type	Heavy Duty Fabricated Steel	
Circuit Breaker Type/Rating	3 Pole MCCB	
Frequency	50 Hz	60Hz
Engine Speed	1500	1800
Fuel Tank Capacity: Litres (US Gal)	350 (92.5)	n/a
Fuel Consump, P250H: l/hr (US Gal/hr)	54.6 (14.4)	n/a
Fuel Consump, P275HE: l/hr (US Gal/hr)	60.1 (15.8)	n/a



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Engine Technical Data

Physical Data		Air System		50 Hz	60 Hz
Manufacturer:	Perkins	Air Filter Type:	Replaceable Element		
Model:	1306-E87TA330	Combustion Air Flow:			
No. of Cylinders/Alignment:	6 in line	m ³ /min (cfm) -Standby:	16.4 (579)	n/a	
Cycle:	4 Stroke	-Prime:	16.4 (579)	n/a	
Induction:	Turbocharged, AA Charge Cooled	Max. Combustion Air Intake Restriction: kPa (in H ₂ O)	6.22 (25.0)	n/a	
Cooling Method:	Water	Radiator Cooling Airflow: m ³ /sec (cfm)	5.3 (187)	n/a	
Governing Type:	Electronic	External Restriction to Cooling Airflow: Pa (in Wg)	120 (0.48)	n/a	
Class:	ISO 8528 G3				
Compression Ratio:	16.9:1				
Displacement: L (cu.in)	8.71 (532)				
Bore/Stroke: mm (in)	116.6 (4.6) / 135.9 (5.3)				
Moment of Inertia: kg m ² (lb/in ²)	0.5360 (762)				
Engine Electrical System:					
-Voltage/Ground	24/Negative				
-Battery Charger Amps	55				
Weight: kg (lbs) -Dry	671 (1480)				
-Wet	698 (1539)				
Performance		50Hz	60Hz		
Engine Speed: rpm	1500	n/a			
Gross Engine Power: kW (hp)					
-Standby	246 (330)	n/a			
-Prime	224 (300)	n/a			
BMEP: kPa (psi)					
-Standby	2261 (328)	n/a			
-Prime	2058 (299)	n/a			
Regenerative Power: kW	18.3	n/a			
Fuel System					
Fuel Filter Type:	Replaceable Element				
Recommended Fuel:	Class 2 Diesel				
Fuel Consumption: L/hr (US Gal/hr)					
	110% Load	100% Load	75% Load	50% Load	
P250H					
50 Hz	60.1 (15.8)	54.6 (14.4)	41.0 (10.8)	27.3 (7.2)	
60 Hz	n/a	n/a	n/a	n/a	
P275HE					
50 Hz	n/a	60.1 (15.8)	45.4 (12.0)	30.0 (7.9)	
60 Hz	n/a	n/a	n/a	n/a	
(based on diesel fuel with a specific gravity of 0.85 and conforming to BS2869, class 2)					
Cooling System		50 Hz	60 Hz		
Cooling System Ambient Capability: °C (°F)	40 (104)	n/a			
Cooling System Capacity: L (US Gal)	39.8 (10.5)	n/a			
Water Pump Type:	Centrifugal				
Heat Rejected to Water & Lube Oil: kW (Btu/min)					
-Standby:	107.5 (6115)	n/a			
-Prime:	95.5 (5432)	n/a			
Heat Radiation to Room: kW (Btu/min)					
-Standby:	62.9 (3578)	n/a			
-Prime:	72.0 (4095)	n/a			
Radiator Fan Load: kW (hp)	6.4 (8.7)	n/a			
Lubrication System					
Oil Filter Type:	Spin-On, Full Flow				
Total Oil Capacity L (US Gal):	26.4 (7.0)				
Oil Pan L (US Gal):	22.7 (6.0)				
Oil Type:	API-CF-4/ACEA E2				
Cooling Method:	Water				
Exhaust System		50 Hz	60 Hz		
Silencer Type:	Industrial (Reactive)				
Silencer Model & Qty:	SD100 (1)				
Pressure Drop Across Silencer System: kPa (in Hg)	tba	n/a			
Silencer Noise Reduction Level: dB	12	n/a			
Max. Allowable Back Pressure: kPa (in Hg)	10.7 (3.2)	n/a			
Exhaust Gas Flow: m ³ /min (cfm)					
-Standby:	44.5 (1569)	n/a			
-Prime:	44.5 (1569)	n/a			
Exhaust Gas Temperature: °C (°F)					
Standby:	528 (982)	n/a			

Alternator Performance Data

Data Item	50 Hz				60 Hz					
	415/240	400/230 230/115 200/115	380/220 220/110	220/127	480/277 240/139	460/266	380/220 220/110	240/120 208/120	230/115	220/127 440/254
Motor Starting Capability* kVA	625	575	525	680	n/a	n/a	n/a	n/a	n/a	n/a
Short Circuit Capacity** %	300	300	300	300	n/a	n/a	n/a	n/a	n/a	n/a
Reactances: Per Unit										
X_d	2.49	2.69	2.98	2.22	n/a	n/a	n/a	n/a	n/a	n/a
X'_d	0.11	0.11	0.13	0.09	n/a	n/a	n/a	n/a	n/a	n/a
X''_d	0.064	0.069	0.076	0.057	n/a	n/a	n/a	n/a	n/a	n/a

Reactances shown are applicable to prime ratings

* Based on 30% voltage dip. Improved motor starting capability is available with optional Permanent Magnet generator or AREP excitation

** With optional Permanent Magnet generator or AREP excitation.

Alternator Technical Data

Physical Data		Operating Data	
Manufacturer:	FG Wilson	Overspeed: RPM	2250
Model:	LL5014J	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.6)	Total Harmonic Content LL/LN	<4%
Wires:	12	Radio Interference	Suppression is in line with British Standard BS 800 and VDE class G & N
Ingress Protection Rating:	IP22	Radiant Heat: kW (Btu/min)	
Excitation System:	SHUNT	-50 Hz	17.92 (1019)
AVR Model:	R448	-60 Hz	n/a

Technical Data

3 Phase Ratings and Performance at 50 Hz, 1500 RPM

3 Phase Ratings and Performance at 60 Hz, 1800 RPM

Voltage	Model: P250H Prime		Model: P275HE Standby		Voltage	Model: P250H Prime		Model: P275HE Standby	
	kVA	kW	kVA	kW		kVA	kW	kVA	kW
415/240	250	200	275	220	480/277	n/a	n/a	n/a	n/a
400/230	250	200	275	220	460/266	n/a	n/a	n/a	n/a
380/220	250	200	275	220	440/254	n/a	n/a	n/a	n/a
230/115	250	200	275	220	380/220	n/a	n/a	n/a	n/a
220/127	245	196	275	220	240/139	n/a	n/a	n/a	n/a
220/110	250	200	275	220	240/120	n/a	n/a	n/a	n/a
200/115	250	200	275	220	230/115	n/a	n/a	n/a	n/a
					220/127	n/a	n/a	n/a	n/a
					220/110	n/a	n/a	n/a	n/a
					208/120	n/a	n/a	n/a	n/a

Definitions

Standby Rating

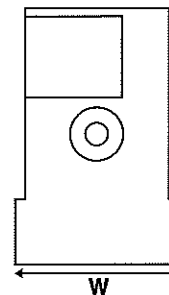
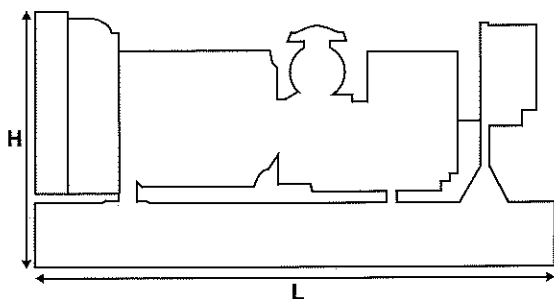
These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The alternator on this model is peak continuous rated (as defined in ISO8528-3).

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.

Standard Reference Conditions

Standard reference conditions 27°C (80°F) Air Inlet Temp, 152.4m (500 ft) A.S.L. All engine performance data based on the above mentioned maximum continuous ratings. Fuel consumption data at full load with diesel fuel with a specific gravity of 0.85 and conforming to BS2869: 1988, Class A2.



Weights & Dimensions

Weights: kg (lbs)		Dimensions: mm (in)	
Net (+ lube oil)	2138 (4714)	Length	2953 (116.3)
Wet (+ lube oil & coolant)	2172 (4789)	Width	1003 (39.5)
Fuel, lube oil & coolant	2468 (5442)	Height	1717 (67.6)

General Data

Documents

A full set of operation and maintenance manuals, circuit wiring diagrams, and commissioning/fault finding instruction leaflets.

Control Panel Standards

The equipment meets the following standards: BS5000, ISO 8528, ISO 3406, IEC 60034, VDE 0530, NEMA MG-1.22.

FG Wilson is a fully accredited ISO9001 company.

Warranty

All equipment is guaranteed for a period of 12 months from date of commissioning or 18 months from shipping, whichever occurs first. Extended warranty terms are available.