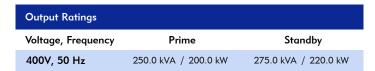


www.FGWilson.com

# P275H-2



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.

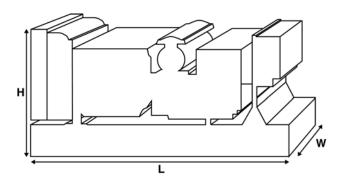




Image for illustration purposes only.

Ratings and Performance Data		
Engine Make & Model:	Perkins® 1306A-E87	7TAG6
Alternator manufactured for FG Wilson by:	Leroy Somer	
Alternator Model:	LL5014H	
Control Panel:	PowerWizard 1.1	
Base Frame:	Heavy Duty Fabricat	ed Steel
Circuit Breaker Type:	3 Pole MCCB	
Frequency:	50 Hz	60 Hz
Engine Speed: RPM	1500	-
Fuel Tank Capacity: litres (US gal)	350 (92.5	5)
Fuel Consumption: I/hr (US gal/hr)		
(100% Load) - <b>P</b>	ime 53.8 (14.2)	-
- Star	dby 58.7 (15.5)	-

#### **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	nd Weights			
<b>Length</b> (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	<b>Dry</b> kg (lb)	<b>Wet</b> kg (lb)
2989 (117.7)	990 (39.0)	1789 (70.4)	2100 (4630)	2122 (4678)
Dry = With Lube Oil Wet = With Lube Oil and Coolant			nt	

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 / Alignment:	6 / In Line	
Cycle:	4 Stroke	
Bore / Stroke: mm (in)	116.6 (4.6)/135.9 (5.4)	
Induction:	Turbocharged Air To Air Charge Cooled	
Cooling Method:	Water	
Governing Type:	Electronic	
Governing Class:	ISO 8528 G2	
Compression Ratio:	16.9:1	
Displacement: I (cu. in)	8.7 (530.9)	
Moment of Inertia: kg m² (lb/in²)	<sup>2</sup> (lb/in <sup>2</sup> ) 1.54 (5266)	
Engine Electrical System:		
- Voltage / Grou	nd 24/Negative	
- Battery Charger Am	<b>ups</b> 45	
Weight: kg (lb) - [	Ory 671 (1479)	
- W	<b>Vet</b> 698 (1539)	

Performance	50	Hz	60 Hz
Engine Speed: rpm	15	500	-
Gross Engine Power: kW (hp)			
- Pri	me 228.0	(306.0)	-
- Stand	lby 250.0	(335.0)	-
BMEP: kPa (psi)			
- Pri	me 2095.0	(303.8)	-
- Stand	<b>Iby</b> 2297.0	(333.2)	-

Fuel System	
-------------	--

Fuel Filter Type: Replaceable Element

Recommended Fuel: Class A2 Diesel or BSEN590

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

	110%	100%	75%	50%
Prime	Load	Load	Load	Load
50 Hz	58.7 (15.5)	53.8 (14.2)	42.3 (11.2)	31.8 (8.4)
60 Hz	-	-	-	-

	100%	75%	50%
Standby	Load	Load	Load
50 Hz	58.7 (15.5)	45.6 (12.0)	33.8 (8.9)
60 Hz	-	-	-

(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:	Paper	Element
Combustion Air Flow: m³/min (cfm)		
- Primo	20.6 (727)	-
- Standb	22.1 (780)	-
Max. Combustion Air Intake Restriction: kPa (in H <sub>2</sub> O)	6.2 (25.0)	-

Cooling System		50 Hz	60 Hz
Cooling System Capacity: 1 (	JS gal)	24.7 (6.5)	-
Water Pump Type:	Water Pump Type:		fugal
Heat Rejected to Water & Lu	ıbe Oil:		
kW (Btu/min)	- Prime	98.0 (5573)	-
	- Standby	101.0 (5744)	-
Heat Radiation to Room: Heat	at radiated from	engine and alternator	
kW (Btu/min)	- Prime	24.5 (1393)	
	- Standby	28.8 (1638)	
Radiator Fan Load: kW (hp)		9.9 (13.3)	-
Radiator Cooling Airflow: m³,	/min (cfm)	349.8 (12353)	-
External Restriction to Cooling Airflow: Pa (in H <sub>2</sub> O)		125 (0.5)	-

Lubrication System	
Oil Filter Type:	Spin-On, Full Flow
Total Oil Capacity: I (US gal)	26.4 (7.0)
Oil Pan: I (US gal)	22.7 (6.0)
Oil Type:	API CI-4
Oil Cooling Method:	Water

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
Maximum Allowable Back Pressure: kPa (in Hg)	10.7 (3.2)	-
Exhaust Gas Flow: m³/min (cfm)		
- Prime	40.5 (1430)	-
- Standby	44.5 (1572)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	526 (979)	-
- Standby	579 (1074)	-

Alternator Physical Data	
Manufactured for FG Wilson by:	Leroy Somer
Model:	LL5014H
No. of Bearings:	1
Insulation Class:	Н
Winding Pitch Code:	2/3 - 6
Wires:	12
Ingress Protection Rating:	IP23
Excitation System:	SHUNT
AVR Model:	R250

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:	4.0%				
Radio Interference:	Suppression is in line with European Standard EN61000-6				
Radiant Heat: kW (Btu/min)					
- 50 Hz	17.8 (1012)				
- 60 Hz	-				

Alternator Performance Data:		50	Hz		6
Data Item	415/240V	400/230V 230/115V 200/115V	380/220V 220/110V	220/127V	
Motor Starting Capability* kVA	495	465	425	543	
Short Circuit Capacity** %	300	300	300	300	
Reactances: Per Unit					
Xd	3.027	3.258	3.610	2.639	
X'd	0.144	0.155	0.171	0.125	
X"d	0.087	0.093	0.103	0.076	

Output Ratings Technical Data 50 Hz					
Voltage	Prime:		Standby:		
	kVA	kW	kVA	kW	
415/240V	240.0	192.0	266.0	212.8	
400/230V	250.0	200.0	275.0	220.0	
380/220V	250.0	200.0	275.0	220.0	
230/115V	250.0	200.0	275.0	220.0	
220/127V	215.0	172.0	240.0	192.0	
220/110V	250.0	200.0	275.0	220.0	
200/115V	250.0	200.0	275.0	220.0	

Output Ratings Technical Data 60 Hz					
Voltage	Prime:		Standby:		
	kVA	kW	kVA	kW	

Reactances shown are applicable to prime ratings.

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

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

# **Documentation** 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 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.

**General Information**