www.FGWilson.com

P275-3

Image for illustration purposes only.

Output Ratings

Voltage, Frequency	Prime	Standby
400V, 50 Hz	250.0 kVA / 200.0 kW	275.0 kVA / 220.0 kW
	- / -	- / -

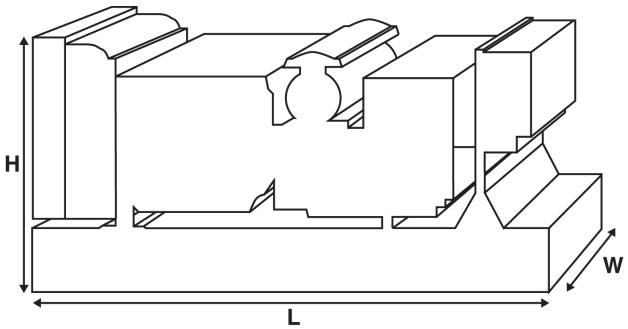
Ratings at 0.8 power factor.

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.



Ratings and Performance Data

Engine Make & Model:		Perkins® 1506A-E88TAG3	
Alternator manufactured for FG Wilson by:		Marelli	
Alternator Model:		MJB250LB4	
Control Panel:		PowerWizard1.1+	
Base Frame:		Heavy Duty Fabricated Steel	
Circuit Breaker Type:		3 Pole MCCB	
Frequency:		**50 Hz**	**60 Hz**
Engine Speed: rpm		1500	-
Fuel Tank Capacity: litres (US gal)		464 (122.6)	
Fuel Consumption: l/hr (US gal/hr)			
(100% Load)	**- Prime**	51.3 (13.6)	-
	- Standby	56.0 (14.8)	-

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 and Weights

Length (L) mm (in)	**Width** (W) mm (in)	**Height** (H) mm (in)	**Dry** kg (lb)	**Wet** kg (lb)
2662 (104.8)	1030 (40.6)	1754 (69.1)	2051 (4522)	2084 (4594)

Dry = With Lube Oil Wet = With Lube 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:	6 / In Line
Cycle:	4 Stroke
Bore / Stroke: mm (in)	112.0 (4.4)/149.0 (5.9)
Induction:	Turbocharged Air To Air Charge Cooled
Cooling Method:	Water
Governing Type:	Electronic
Governing Class:	ISO 8528 G2
Compression Ratio:	16.1:1
Displacement: l (cu. in)	8.8 (537.0)
Moment of Inertia: kg m² (lb/in²)	2.40 (8212)
Engine Electrical System:	
- Voltage / Ground	24/Negative
- Battery Charger Amps	45
Weight: kg (lb) **- Dry**	778 (1715)
- Wet	800 (1764)

Performance	50 Hz	60 Hz
Engine Speed: rpm	1500	-
Gross Engine Power: kW (hp)		
- Prime	236.0 (316.0)	-
- Standby	258.0 (346.0)	-
BMEP: kPa (psi)		
- Prime	2144.0 (310.9)	-
- Standby	2344.0 (339.9)	-

Fuel System	
Fuel Filter Type:	Replaceable Element
Recommended Fuel:	Class A2 Diesel or BSEN590

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

Prime	110% Load	100% Load	75% Load	50% Load
50 Hz	56.0 (14.8)	51.3 (13.6)	39.9 (10.5)	28.8 (7.6)
60 Hz	-	-	-	-

Standby	100% Load	75% Load	50% Load
50 Hz	56.0 (14.8)	43.3 (11.4)	31.1 (8.2)
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)		
- Prime	14.1 (498)	-
- Standby	15.0 (530)	-
Max. Combustion Air Intake Restriction: kPa (in H_2O)	6.2 (24.9)	-

Cooling System	50 Hz	60 Hz
Cooling System Capacity: l (US gal)	33.0 (8.7)	-
Water Pump Type:	Centrifugal	
Heat Rejected to Water & Lube Oil:		
kW (Btu/min) **- Prime**	110.0 (6256)	-
- Standby	112.0 (6369)	-
Heat Radiation to Room: Heat radiated from engine and alternator		
kW (Btu/min) **- Prime**	27.8 (1581)	
- Standby	29.8 (1695)	
Radiator Fan Load: kW (hp)	7.7 (10.3)	-
Radiator Cooling Airflow: m³/min (cfm)	6.8 (241)	-
External Restriction to Cooling Airflow: Pa (in H_2O)	125 (0.5)	-

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: l (US gal)	39.0 (10.3)
Oil Pan: l (US gal)	36.0 (9.5)
Oil Type:	API CI-4 0W-30
Oil Cooling Method:	Water

Exhaust System	50 Hz	60 Hz
Maximum Allowable Back Pressure: kPa (in Hg)	10.0 (3.0)	-
Exhaust Gas Flow: m³/min (cfm)		
- Prime	37.5 (1324)	-
- Standby	40.4 (1427)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	537 (999)	-
- Standby	558 (1036)	-

Alternator Physical Data	
Manufactured for FG Wilson by:	Marelli
Model:	MJB250LB4
No. of Bearings:	1
Insulation Class:	H
Winding Pitch Code:	2/3 - M0
Wires:	12
Ingress Protection Rating:	IP23
Excitation System:	SHUNT
AVR Model:	Mark V

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:	2.0%
Radio Interference:	Suppression is in line with European Standard EN 55011
Radiant Heat: kW (Btu/min)	
- 50 Hz	14.8 (842)
- 60 Hz	-

Alternator Performance Data:	50 Hz			60 Hz
Data Item	415/240V	400/230V 230/115V 230 V	380/220V	
Motor Starting Capability* kVA	403	374	337	
Short Circuit Capacity %**	300	300	300	
Reactances: Per Unit				
Xd	2.660	3.040	3.230	
X'd	0.219	0.251	0.267	
X"d	0.084	0.096	0.102	

Reactances shown are applicable to prime ratings.
*Based on 30% voltage dip at 0.0 power factor and SHUNT excitation.
**With optional permanent magnet generator or AREP excitation.

Output Ratings Technical Data 50 Hz				
Voltage	**Prime:**		**Standby:**	
	kVA	**kW**	**kVA**	**kW**
415/240V	235.0	188.0	260.0	208.0
400/230V	250.0	200.0	275.0	220.0
380/220V	240.0	192.0	265.0	212.0
230/115V	250.0	200.0	275.0	220.0
230 V	250.0	200.0	275.0	220.0

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

General Information

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.

In line with our policy of continuous product development, we reserve the right to change specification without notice.