



P26-3SU

Standard Alternator

Overview

Voltage, Frequency		Prime	Standby
240 V, 50 Hz	kVA	24.0	26.0
	kW	24.0	26.0
Power Factor		1	
Length	mm	1565 (61.6)	
Width	mm	860 (33.9)	
Height	mm	1256 (49.4)	
Weight (Dry)	kg	743 (1638.0)	
Weight (Wet)	kg	756 (1666.7)	
Base Frame		FB4	
Enclosure		No Enclosure	

Ratings at 1 power factor.

Please refer to the output ratings technical data section for specific generator set outputs per voltage.

Ratings in accordance with ISO 8528, ISO 3046, IEC 60034, BS5000 and NEMA MG-1.22.

Generator set pictured may include optional accessories.

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

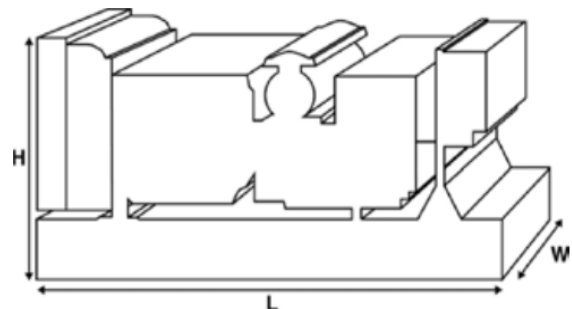
Note: Standard reference conditions 25°C (77°F) Air Inlet Temp, 100m (328 ft) A.S.L. 30% relative humidity. Fuel consumption data at full load with diesel fuel with specific gravity of 0.85 and conforming to BS2869. 1998, Class A2.

FG Wilson offer a range of optional features to allow you to tailor our generator sets to meet your power needs. Options available 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



Image for illustration purposes only



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For further information on all of the standard and optional features accompanying this product please contact your local Dealer or visit : www.fgwilson.com

Ratings and Performance Data

Engine Make		Perkins
Engine Model		1103A-33G1
Alternator Make		FG Wilson
Alternator Model		FGL20050
Control Panel		FG100
Base Frame		FB4
Circuit Breaker Type		3 POLE MCCB
Frequency	Hz	50
Engine Speed	rpm	1500
Fuel Tank Capacity	litres (US gal)	71 (18.8)
Fuel Consumption Prime	litres (US gal)/hr	6.8 (1.8)
Fuel Consumption Standby	litres (US gal)/hr	7.4 (2.0)

Engine Technical Data

No. of Cylinders		3
Alignment		IN LINE
Cycle		4 STROKE
Bore	mm (in)	105 (4.1)
Stroke	mm (in)	127 (5.0)
Induction		NATURALLY ASPIRATED
Cooling Method		WATER
Governing Type		MECHANICAL
Governing Class		ISO 8528 G2
Compression Ratio		19.25:1
Displacement	L (cu. in)	3.3 (201.4)
Moment of Inertia	kg m ² (lb/in ²)	1.10 (3896)
Voltage		12
Ground		Negative
Battery Charger Amps		65
Engine Weight Dry	kg (lb)	341 (752)
Engine Weight Wet	kg (lb)	348 (767)

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Engine Performance Data

Engine Speed	rpm	1500
Gross Engine Power Prime	kW (hp)	28.2 (38)
Gross Engine Power Standby	kW (hp)	31.0 (42)
BMEP Prime	kPa (psi)	684 (99.2)
BMEP Standby	kPa (psi)	752 (109.0)

Fuel System

Fuel Filter Type	Replaceable Element				
Recommended Fuel	Class A2 Diesel				
Fuel Consumption at		110 % Load	100 % Load	75 % Load	50 % Load
50 Hz Prime	l/hr (US gal/hr)	7.4 (2.0)	6.8 (1.8)	5.1 (1.3)	3.8 (1.0)
50 Hz Standby	l/hr (US gal/hr)	- (-)	7.4 (2.0)	5.5 (1.5)	4.0 (1.1)

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

Air System

Air Filter Type	Replaceable Element	
Combustion Air Flow Prime	m ³ /min (cfm)	2.20 (78)
Combustion Air Flow Standby	m ³ /min (cfm)	2.20 (78)
Max. Combustion Air Intake Restriction	kPa	6.50 (26.1)

Cooling System

Cooling System Capacity	l (US gal)	10.2 (2.7)
Water Pump Type	Centrifugal	
Heat Rejected to Water & Lube Oil: Prime	kW (Btu/min)	16.0 (910)
Heat Rejected to Water & Lube Oil: Standby	kW (Btu/min)	18.0 (1024)
Heat Radiation to Room*: Prime	kW (Btu/min)	147.0 (286.5)
Heat Radiation to Room*: Standby	kW (Btu/min)	8.7 (495.0)
Radiator Fan Load	kW (hp)	0.31 (0.42)
Radiator Cooling Airflow	m ³ /min (cfm)	62.6 (2211)
External Restriction to Cooling Airflow	Pa (in H ₂ O)	125 (0.50)

*: Heat radiated from engine and alternator

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.

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Lubrication System

Oil Filter Type		Spin-On, Full Flow
Total Oil Capacity	l (US gal)	8.3 (2.2)
Oil Pan Capacity	l (US gal)	7.8 (2.1)
Oil Type		API CG4 / CH4 15W-40
Oil Cooling Method		WATER

Exhaust System

Maximum Allowable Back Pressure	kPa (in Hg)	8.0 (2.400)
Exhaust Gas Flow: Prime	m ³ /min (cfm)	5.700 (201)
Exhaust Gas Flow: Standby	m ³ /min (cfm)	5.800 (205)
Exhaust Gas Temperature: Prime	°C (°F)	500.0 (932.0)
Exhaust Gas Temperature: Standby	°C (°F)	520.0 (968.0)

Alternator Physical Data

No. of Bearings		1
Insulation Class		H
Winding Code		M
Winding Pitch		2/3
Wires		3
Ingress Protection Rating		IP23
Excitation System		SHUNT
AVR Model		R121

* dependant on voltage code selected

Alternator Operating Data

Overspeed	rpm	2250
Voltage Regulation: (Steady state)	%	+/- 1.0
Wave Form NEMA = TIF		100
Wave Form IEC = THF	%	2
Total Harmonic content LL/LN	%	3.5
Radio Interference		EN61000-6
Radiant Heat: 50 Hz	kW (Btu/min)	2.7 (154.0)

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Alternator Performance Data

Short Circuit Capacity (%)	270			
Voltage Code	Motor Starting Capability (kVA)	Reactances X _d	Reactances X' _d	Reactances X'' _d
240V	59	1.496	0.165	0.083
230V	56	1.629	0.180	0.090
220V	54	1.780	0.196	0.098

Reactances shown are applicable to prime ratings.

*Based on 30% voltage dip at 0.9 power factor.

**With optional independent excitation system (PMG / AUX winding)

Output Ratings

Prime			Standby	
Voltage Code	kVA	kW	kVA	kW
240V	24.0	24.0	26.0	26.0
230V	24.0	24.0	26.0	26.0
220V	24.0	24.0	26.0	26.0



Documentation

Operation and maintenance manual including circuit wiring diagrams.

Generator Set Standards

The equipment meets the following standards: BS5000, ISO 8528, ISO 3046, IEC 60034, NEMA MG-1.22.

Caterpillar (NI) Limited is the manufacturer of FG Wilson brand diesel generating sets, and our facilities manufacture products in the following locations:

Brazil • China • India

With headquarters in Northern Ireland, FG Wilson products are distributed through a Global Dealer Network. To contact your local Sales Office please visit the FG Wilson website at www.fgwilson.com.

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