

F35-1

Output Ratings		
Voltage, Frequency	Prime	Standby
400V, 50 Hz	32.0 kVA / 25.6 kW	35.0 kVA / 28.0 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.

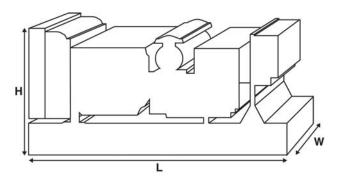




Image for illustration purposes only.

Ratings and Performance Da	ta		
Engine Make & Model:		FG Wilson FD4-3	3.9A1
Alternator manufactured for FG Wilson by:		Marelli	
Alternator Model:		MJB 160 MB4	
Control Panel:		DCP-10	
Base Frame:		Heavy Duty Fabr	icated Steel
Circuit Breaker Type:		3 Pole MCB	
Frequency:		50 Hz	60 Hz
Engine Speed: rpm		1500	-
Fuel Tank Capacity: litres (US gal)		145 (\$	38.3)
Fuel Consumption: I/hr (US gal/h	r)		
(100% Load)	- Prime	9.4 (2.5)	-
	- Standby	10.0 (2.6)	-
	-		

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
- Additional alarms and shutdowns
- Industrial silencer

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)
1680 (66.1)	760 (29.9)	1273 (49.2)	724 (1596)	736 (1623)
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	:: 4 / In Line		
Cycle:	4 Stroke		
Bore / Stroke: mm (in)	102.0 (4.0) / 118.0 (4.6)		
Induction:	Naturally Aspirated		
Cooling Method:	Water		
Governing Type:	Electronic		
Governing Class:	ISO 8528 G2		
Compression Ratio:	18:1		
Displacement: I (cu. in)	3.9 (235.6)		
Moment of Inertia: kg m ² (Ib/in	2) -		
Engine Electrical System:			
- Voltage / Gro	und 12/Negative		
- Battery Charger Ar	nps 54		
Weight: kg (lb)	Dry 300 (661)		
- '	Wet 325 (716)		

Air Systems	50 Hz	60 Hz
Air Filter Type:	Replaceable	e Element
Combustion Air Flow: m ³ /min (cfm)		
- Prime	-	-
- Standby	2.8 (97)	-
Max. Combustion Air Intake Restriction: kPa (in H ₂ O)	5.0 (20.1)	-

Cooling System		50 Hz	60 Hz
Cooling System Capacity: I (U	S gal)	12.0 (3.2)	-
Water Pump Type:		Centrif	ugal
Heat Rejected to Water & Lu	be Oil:		
kW (Btu/min)	- Prime	-	-
	- Standby	-	-
Heat Radiation to Room: Heat radiated from engine and alternator			
kW (Btu/min)	- Prime	-	-
	- Standby	-	-
Radiator Fan Load: kW (hp)		1.4 (1.9)	-
Radiator Cooling Airflow: m ³ /	min (cfm)	66.0 (2331)	-
External Restriction to Cooling Airflow: Pa (in H ₂ O)		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: I (US gal)	8.5 (2.2)
Oil Pan: I (US gal)	-
Oil Type:	15W-40 CD
Oil Cooling Method:	Water

Exhaust System	50 Hz	60 Hz
Maximum Allowable Back Pressure: ^{kPa} (in Hg)	6.5 (1.9)	-
Exhaust Gas Flow: m ³ /min (cfm)		
- Prime	-	-
- Standby	8.3 (292)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	-	-
- Standby	-	-

Performance		50 Hz	60 Hz	
Engine Speed: rpm		1500	-	
Gross Engine Power: kW (hp)				
	- Prime	33.0 (44.0)	-	
	- Standby	35.0 (47.0)	-	
BMEP: kPa (psi)				
	- Prime	685.0 (99.3)	-	
	- Standby	726.0 (105.3)	-	

Fuel System					
Fuel Filter Type: Spin On					
Recommended Fuel: Class A2 Diesel or BSEN590				or BSEN590	
Fu	uel Consum	nption: I/hr (US g	al/hr)		
		110%	100%	75%	50%
	Prime	Load	Load	Load	Load
	50 Hz	10.0 (2.6)	9.4 (2.5)	7.0 (1.8)	4.9 (1.3)
	60 Hz	-	-	-	-
_					
			100%	75%	50%
	Standby		Load	Load	Load
_	50 Hz		10.0 (2.6)	7.6 (2.0)	5.2 (1.4)
	60 Hz		-	-	-

(Based on diesel fuel with a specific gravity of 0.85 and conforming to BS2869, Class A2)

Alternator Physical Data			
Manufactured for FG Wilson by:	Marelli		
Model:	MJB 160 MB4		
No. of Bearings:	1		
Insulation Class:	Н		
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)	+/- 1.0%			
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 EN55011			
Radiant Heat: kW (Btu/min)				
- 50 Hz	4.0 (227)			
- 60 Hz	-			

Alternator Performance Data:	50 Hz			
Data Item	415/240V	400/230V	380/220∨	
Motor Starting	52	48	43	
Capability* kVA	52	40		
Short Circuit				
Capacity %	-	-	-	
Reactances: Per Unit				
Xd	2.546	2.740	2.932	
X'd	0.232	0.250	0.267	
X"d	0.099	0.107	0.114	

Reactances shown are applicable to prime ratings. *Based on 30% voltage dip at 0.0 power factor and SHUNT excitation.

Output Ratings Technical Data 50 Hz					Output Ratings Technical Data 60 Hz						
Voltage	Prime:		Standby:		Voltage	Prime:		Standby:			
	kVA	kW	kVA	kW		kVA	kW	kVA			
415/240V	32.0	25.6	35.0	28.0							
400/230V	32.0	25.6	35.0	28.0							
380/220V	30.9	24.7	34.0	27.2							

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, limited to 2,000 running hours per year, has 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.