

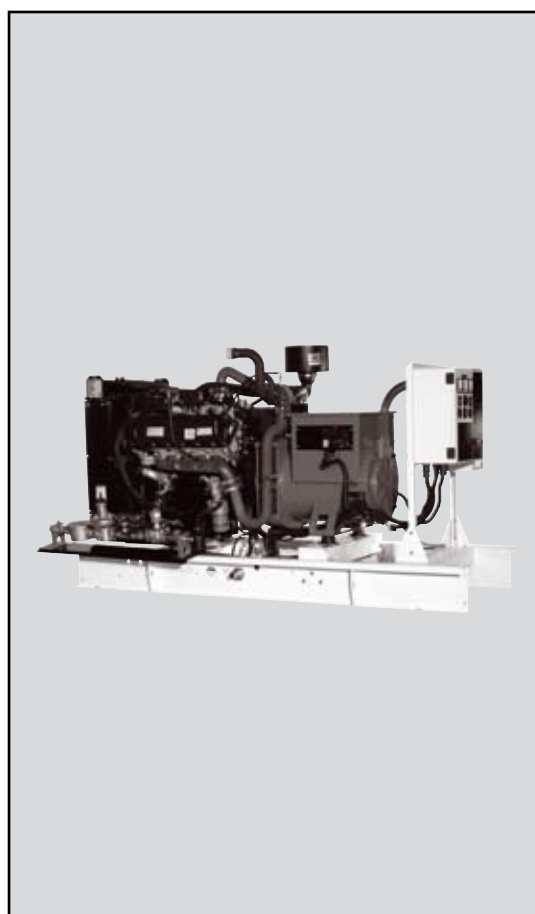
FG85P1/FG100E1



Output Ratings		
Generating Set Model	FG85P1/FG100E1	
	Nat Gas	
	Prime*	Standby*
380 – 415V, 50 Hz	85.0 kVA	100 kVA
	68.0 kW	80.0 kW
480V, 60 Hz	106 kVA	125.0 kVA
	85.0 kW	100 kW

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

Technical Data		
Engine Make & Model	Ford WSG 1068 turbo	
Alternator Model	LL3014B	
Base Frame Type	Heavy Duty Fabricated Steel	
Circuit Breaker Type/Rating	3 Pole MCCB	
Frequency	50 Hz	60 Hz
Engine Speed	1500	1800
Fuel Consump m ³ /hr (cfh) NG	10.8 (380)	12.9 (454)



Weights & Dimensions

Weights: kg (lbs)		Dimensions: mm (in)	
Wet (+ lube oil & coolant)	999 (2198)	Length	2400 (96.0)
		Width	918 (36.7)
		Height	1339 (49.6)



FG Wilson has manufacturing facilities 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



Alternator Performance Data

Data Item	50 Hz				60 Hz				
	415/240	400/230 230/115 200/115	380/220 220/110	220/127	480/227 240/139	380/220 220/110	240/120 208/120	230/115	220/127 440/254
Motor Starting Capability* kVA	187	176	160	208	206	136	160	149	177
Short Circuit Capacity** %	300	300	300	300	300	300	300	300	300
Reactances: Per Unit									
X_d	2.91	3.14	3.47	2.59	3.19	5.09	4.26	4.6	3.8
X'_d	0.11	0.12	0.13	0.10	0.11	0.19	0.16	0.17	0.15
X''_d	0.064	0.069	0.077	0.06	0.07	0.113	0.094	0.101	0.084

Reactances shown are applicable to prime ratings

* Based on 30% voltage dip. Improved motor starting is available with optional AREP excitation

** With optional AREP excitation

Alternator Technical Data

Physical Data		Operating Data	
Manufacturer:	FG Wilson	Overspeed: RPM	2250
Model:	LL3014B	Voltage Regulation (steady state)	+/- 5%
No. of Bearings:	1	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 BSEN50081 and BSEN50082
Ingress Protection Rating:	IP23	Radiant Heat: kW (Btu/min)	
Excitation System:	SHUNT	-50 Hz:	8.1 (461)
AVR Model:	R230	-60 Hz:	10.8 (614)

Technical Data

3 Phase Ratings and Performance at 50 Hz, 1500 RPM

3 Phase Ratings and Performance at 60 Hz, 1800 RPM

Voltage	Model: FG85P1 Prime		Model: FG100E1 Standby		Voltage	Model: FG85P1 Prime		Model: FG100E1 Standby	
	kVA	kW	kVA	kW		kVA	kW	kVA	kW
415/240	85.0	68.0	100.0	80.0	480/277	106.2	85.0	125.0	100.0
400/230	85.0	68.0	100.0	80.0	440/254	106.2	85.0	125.0	100.0
380/220	85.0	68.0	100.0	80.0	380/220	106.3	85.0	122.0	97.6
230/115	85.0	68.0	100.0	80.0	240/139	106.2	85.0	125.0	100.0
220/127	85.0	68.0	100.0	80.0	240/120	106.2	85.0	125.0	100.0
220/110	85.0	68.0	100.0	80.0	230/115	106.2	85.0	125.0	100.0
200/115	85.0	68.0	100.0	80.0	220/127	106.2	85.0	125.0	100.0
					220/110	106.2	85.0	122.0	97.6
					208/120	106.2	85.0	125.0	100.0

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

Ratings in accordance with ISO8528. All engine performance data based on the above mentioned maximum continuous ratings. Fuel Consumption data assumes complete combustion of LPG fuel with a calorific value of 95MJ/m³ and of Natural gas with a calorific value of 34.4MJ/m³.

General Data

Documents

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

Generating Set Standards

The equipment meets the following standards: BS5000, ISO 8528, ISO 3046, IEC 60034, VDE 0530.

FG Wilson is a fully accredited ISO9001 company.

Warranty

All equipment carries full manufacturer's warranty. Extended warranty terms available. For details on warranty cover please contact your local dealer, or visit our website, www.FGWilson.com

