

# P605-5

Output Ratings		
Voltage, Frequency	Prime	Standby
380/220 V, 50 Hz	550.0 kVA / 440.0 kW	605.0 kVA / 484.0 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.

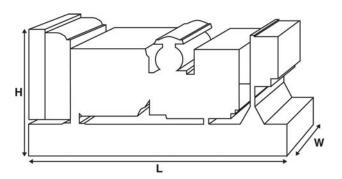




Image for illustration purposes only.

Ratings and Performance Data		
Engine Make & Model:	Perkins 2800	6A-E18TAG1
Alternator manufactured for FG Wilson by:	WEG	
Alternator Model:	GTA 312 AE	DI
Control Panel:	PowerWizara	11.1+
Base Frame:	Heavy Duty	Fabricated Steel
Circuit Breaker Type:	3 Pole MCC	В
Frequency:	50 Hz	60 Hz
Engine Speed: rpm	1500	-
Fuel Tank Capacity: litres (US gal)	11;	32 (299.0)
Fuel Consumption: I/hr (US gal/hr)		
(100% Load)	Prime 107.9 (28.	5) -
- S	andby 120.1 (31.)	7) -

## 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 an	d Weights			
Length (L) mm (in)	Width (W) mm (in)	Height (H) mm (in)	<b>Dry</b> kg (lb)	Wet kg (lb)
3900 (153.5)	1461 (57.5)	2156 (84.9)	4094 (9026)	4162 (9176)
Dry = With Lube	Oil	Wet = With Lube	e 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	t: 6 / In Line
Cycle:	4 Stroke
Bore / Stroke: mm (in)	145.0 (5.7)/183.0 (7.2)
Induction:	Turbocharged Air To Air Charge Cooled
Cooling Method:	Water
Governing Type:	Electronic
Governing Class:	ISO 8528 G2
Compression Ratio:	14.5:1
Displacement: I (cu. in)	18.1 (1104.5)
Moment of Inertia: kg m <sup>2</sup> (lb/in	<sup>2)</sup> 7.44 (25424)
Engine Electrical System:	
- Voltage / Gro	und 24/Negative
- Battery Charger A	mps 70
Weight: kg (lb)	Dry 2050 (4519)
- '	Wet 2158 (4758)

Performance		50 Hz	60 Hz
Engine Speed: rpm		1500	-
Gross Engine Powe	er: kW (hp)		
	- Prime	495.0 (664.0)	-
	- Standby	544.0 (730.0)	-
BMEP: kPa (psi)			
	- Prime	2184.0 (316.8)	-
	- Standby	2400.0 (348.1)	-

Fuel Systen	n			
Fuel Filter	Туре:	E	co Replaceable	Element
Recommen	ded Fuel:	C	lass A2 Diesel a	or BSEN590
Fuel Consu	mption: I/hr (US g	al/hr)		
	110%	100%	75%	50%
Prime	Load	Load	Load	Load
50 Hz	120.1 (31.7)	107.9 (28.5)	81.6 (21.6)	57.8 (15.3)
60 Hz	-	-	-	-
		100%	75%	50%
Standby	r	Load	Load	Load
50 Hz		120.1 (31.7)	89.2 (23.6)	62.4 (16.5)
60 Hz		-	-	-

(Based on Class A2)

Air Systems	50 Hz	60 Hz
Air Filter Type:	Non Car	nister
Combustion Air Flow: m <sup>3</sup> /min (cfm)		
- Prime	37.0 (1307)	-
- Standby	40.0 (1413)	-
Max. Combustion Air Intake Restriction: kPa (in H <sub>2</sub> O)	6.4 (25.7)	-

Cooling System	50 Hz	60 Hz
Cooling System Capacity: I (US gal)	68.5 (18.1)	-
Water Pump Type:	Centr	rifugal
Heat Rejected to Water & Lube Oil:		
kW (Btu/min) - Pri	me 185.0 (10521)	-
- Stan	dby 190.9 (10856)	-
Heat Radiation to Room: Heat radiated	from engine and alternator	r
kW (Btu/min) - Pri	me 70.6 (4015)	
- Stan	dby 76.8 (4368)	
Radiator Fan Load: kW (hp)	9.0 (12.1)	-
Radiator Cooling Airflow: m³/min (cfm)	373.2 (13179)	-
External Restriction to Cooling Airflow: Pa (in H <sub>2</sub> 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:	Eco, Full Flow
Total Oil Capacity: I (US gal)	55.5 (14.7)
Oil Pan: I (US gal)	53.5 (14.1)
Oil Type:	API CH4 / CI4
Oil Cooling Method:	Water

Exhaust System	50 Hz	60 Hz
Maximum Allowable Back Pressure: <sup>kPa</sup> (in Hg)	6.9 (2.0)	-
Exhaust Gas Flow: m <sup>3</sup> /min (cfm)		
- Prime	88.0 (3108)	-
- Standby	95.3 (3365)	-
Exhaust Gas Temperature: °C (°F)		
- Prime	521 (969)	-
- Standby	523 (974)	-

Alternator Physical Data	
Manufactured for FG Wilson by:	WEG
Model:	GTA 312 AEDI
No. of Bearings:	1
Insulation Class:	н
Winding Pitch Code:	2/3 - NA
Wires:	12
Ingress Protection Rating:	IP21
Excitation System:	AUX COIL
AVR Model:	GRT7-TH4E

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:	5.0%
Radio Interference:	Suppression is in line with European Standard EN61000-6
Radiant Heat: kW (Btu/min)	
- 50 Hz	37.6 (2138)
- 60 Hz	-

Alternator Performance Data:	50 Hz	60 Hz							
Data Item	380/220V								
Motor Starting Capability* kVA	1352								
Short Circuit Capacity** %	300								
Reactances: Per Unit									
Xd	2.030								
X'd	0.150								
X"d	0.120								

Reactances shown are applicable to prime ratings. \*Based on 30% voltage dip at 0.6 power factor and AUX COIL excitation. \*\*With optional permanent magnet generator or AREP excitation.

Output Rating	gs Technical Do	ata 50 Hz		
Voltage	Pri	me:	Star	ndby:
	kVA	kW	kVA	kW
380/220V	550.0	440.0	605.0	484.0

### 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.

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