

Output Ratings	
Generating Set Model	P450E1
380 – 415V, 50 Hz	450 kVA 360 kW
480V, 60 Hz	500 kVA 400 kW

Ratings at 0.8 pf

#### Ratings Definitions

Standby Power – Model P450E1

These ratings are applicable for supplying continuous electrical power (at variable load) in 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).

Technical Data		
Engine Model:	Perkins 2306C-E14TAG3	
Alternator Model:	LL6014F	
Number of Cylinders:	6 in-line	
Cubic Capacity: Litres (cu.in)	14.6 (891)	
Bore/Stroke: mm (in)	137 (5.4) / 165 (6.5)	
Compression ratio:	15.9:1	
Aspiration:	Turbocharged, AA Charge Cooled	
Frequency:	<b>50 Hz</b>	<b>60 Hz</b>
Engine Speed:	1500 RPM	1800 RPM
Gross Engine Power: kW (hp)	396 (531)	447 (599)
BMEP: kPA (psi)	2170 (315)	2030 (294)
Piston Speed: m/sec (ft/sec)	8.26 (20.7)	9.91 (32.5)
Fuel Tank Capacity: Litres (US Gal)	782.3 (207)	782.3 (207)
Fuel Consump, P450E1: 1/hr (USg/hr)	95.5 (25.2)	103.1 (27.2)
Heat Rejection to Exhaust System: kW (Btu/min)	329 (18714)	340 (19339)
Heat Rejection to Cooling System: kW (Btu/min)	148 (8418)	163 (9271)
Total Radiated Heat: kW (Btu/min)	41 (2332)	44 (2503)
Exhaust Temperature: °C (°F)	474 (885)	453 (847)
Radiator Cooling		
Air Flow: m <sup>3</sup> /min (cfm)	438 (15465)	530 (18714)
Combustion Air Flow: m <sup>3</sup> /min (cfm)	34.6 (1222)	37.6 (1328)
Exhaust Gas Flow: m <sup>3</sup> /min (cfm)	86.6 (3058)	91.6 (3235)

Note: Standard reference conditions 27°C (80°F) Air Inlet Temp, 152.4m (500ft) A.S.L. 60% relative humidity. All engine performance data based on the above mentioned maximum continuous ratings. Fuel consumption data at full load with diesel fuel with specific gravity of 0.85 and conforming to BS2869: 1998, Class A2.

Dimensions and Weights				
Length: mm (in)	Width: mm (in)	Height: mm (in)	Dry: kg (lb)	Wet: kg (lb)
3601 (142)	1110 (43.7)	2065 (81.3)	3450 (7606)	3500 (7716)
Dry = With Lube Oil		Wet = With Lube Oil and Coolant		

Generating set pictured may include optional accessories



# P450E1



**FG Wilson (Engineering) Ltd**  
 Old Glenarm Road, Larne, County Antrim BT40 1EJ  
 Northern Ireland, United Kingdom  
 Tel: +44 (0) 28 2826 1000 Fax: +44 (0) 28 2826 1111  
[www.FGWilson.com](http://www.FGWilson.com)

