



Power Solution

PL400



OUTPUT RATINGS

Generating Set Model - PL400	Prime Power	Standby Power
380 - 415V, 50 Hz / 1500 RPM	400.0 KVA	450.0 KVA
operating Temp 40 C	320.0 Kw	360.0 Kw
480 - 220 , 60 Hz / 1800 RPM	438.0 KVA	500.0 KVA
Operating Temp 40 C	350.0 Kw	400.0 Kw

RATINGS DEFINITIONS

Prime Power : Variable load Unlimited hours usage with an average load factory of 80% of the published prime power over each 24 hour period. A 10% overload is available for 1 hour in every 12 hours of operation.

Standby power: Variable load. Limited to 500 hours annual usage up to 300 hours of which may be continuous running. No overload is permitted.

TECHNICAL DATA: ENGINE

Engine Model:	Perkins 2306C - E14 TAG3	
Number of Cylinders:	6 Vertical in-line	
Displacement:	14.6 liters	
Bore / Stroke: mm (in)	137 X 165 mm	
Compression ratio:	15.9:1	
Aspiration:	Turbo charger air to air charge cooled	
Cycle:	4 Stroke	
Combustion system	direct injection	
Total Coolant Capacity:	47.0 liters	
Total Lubrication System Capacity:	68.0 liters	
Rotation:	Anti Clockwise	
Cooling System:	Water - Cooled	
Engine Speed:	1500 RPM	1800 RPM
Gross Engine Power: Kw (hp)	353.0 (473.0)	393.0 (527.0)
Piston Speed: m/sec (ft/sec)	6.26 (27.1)	9.91 (32.5)
Fuel Tank Capacity: Liters (US Gal)	728.3 (207.0)	728.3 (207.0)
Fuel Consump, Prime PL400: 1/h (Usg / hr)	81.1 (21.45)	94.2 (24.90)
Fuel Consump, Standby PL450: 1/hr (Usg/hr)	88.3 (23.35)	103.9 (27.45)

TECHNICAL DATA: ALTERNATOR

Alternator Model:	LEROY SOMER LSA - 47.2 S4	
Insulation glass:	H	
Winding pitch:	2/3 (N °6) / 6 (N °6S)	
Terminals:	12 (N °6) / 6 (N °6S)	
Drip proof:	IP23	
altitude:	≤ 1000 m	
Overspeed:	2250 min ⁻¹	
Air flow:	0.9 m ³ /s (50 Hz) 1.1 (60 Hz)	
Excitation system	SHUNT (12 wire)	AREP or PMG
A.V.R. Model:	R230	R448
Voltage regulation (*):	± 0.5%	
Sustained short-circuit current:	-	300% (3 IN):10s
Total harmonic TGH / THG (**)	at no load < 1.5% - on load < 2%	
Waveform:NEMA = TIF	< 50	< 50
Wave from: I.E.C =THF	< 2%	< 2%

Note: Derating may be required for conditions outside these; consult Perkins Engines Company Limited Generator powers are typical and are based on an average alternator efficiency and a power factor (Cos. φ) of 0.8

Fuel specification: BS 2869; part 2 1998 Class A2 or DIN EN 590

Lubricating oil: 15 W40 To API CG4

DIMENSIONS AND WEIGHTS

Length: mm (in)	Width: mm (in)	Height: mm (in)	Dry: Kg (lb)	Wet: Kg (lb)
3601 (142.0)	1110 (42.3)	2065 (81.0)	3300 (7275)	3350 (7385)

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