

# Model : ATL-20PKN

Powered by PERKINS



## Generator Specification

Service	PRP	ESP
Power (kVA)	20	22
Power (kW)	16	18
Rated Speed (r.p.m)	1500	
Standard Voltage (V)	400/230V	
Rated at power factor (cos phi)	0.8	

### (1) PRP (Prime Power)

According to ISO8528-1, prime power is the maximum power available during a variable power sequence, which may be run for an unlimited number of hours per year, between stated maintenance intervals. The permissible average power output during at 24 hours period shall not exceed 80% of the prime power. 10% overload available for governing purposes only.

### (2) ESP (Standby Power)

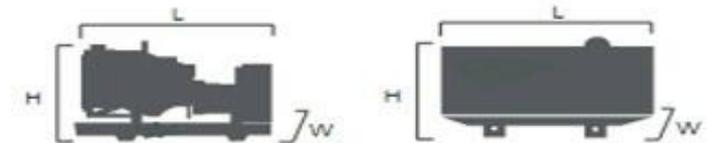
According to ISO 8528-1, it is defined as the maximum power available, under the agreed operating conditions, for which the generating set is capable of delivering for up to 500 hours of operation per year ( of which no more than 300 hours for continuative use) with the maintenance intervals and procedures being carried out as prescribed by the manufactures. No overload capability is available

Powers	ESP		PRP		Standby
	Voltage (V)	KVA	KW	KVA	KW
415/240	22	18	20	16	30.6
400/230	22	18	20	16	31.8
380/220	22	18	20	16	33.4

Performance Data		
Model	ATL20PKN	
Engine Brand	Perkins	
Engine Model	404A-22G1	
Speed vontrol type	Mechanical	
Phase	3	
Control system	Digital	
Starter motor voltage	12V	
Frequency	50HZ	
Enigne speed (RPM)	1500	
Fuel Consumption (L/H)	100% standby power	6.1
	100% prime power	5.3
	75% prime power	4
	50% prime power	2.9

### Standard reference conditions

Note : standard reference condition 25C (77F) air inlet temp. 100m (328ft) A.S.L 30% relative humidity. Fuel consumption dat with diesel fuel with specific gravity of 0.85 and conforming to BS 2869: 1998, Class A2



Dimension and Wiegth		
Dimension	Open	Silent
Length (L)	1570 mm	2150 mm
Width (W)	550 mm	730 mm
Height (H)	1190 mm	1136 mm
Net Weight	430 KG	700 KG
Fuel Tank (L)	86	50

■ **Engine Specification : 404A-22G1**

**Basic technical data**

No. Of cylinders	3
Cylinder arrange	In line
Cycle	4 stroke
Induction system	Naturally aspirated
Compression ratio	23.3 : 1
Bore	84 mm
Stroke	100 mm
Displacement	2.2 L
All rating certified to within	3%
Speed variation at constant load	0.25%

**Cooling system**

Total coolant capacity with radiator	7.0 L
Total coolant capacity without radiator	3.6 L
Maximum top tank temp.	112 C
Thermostat operation range	82-95 C
Radiator face area	0.167 m
Rows and Material	2 rows aluminium
Pressure cap setting	90 kpa
Fan diameter	320.00 mm
Drive ratio	1.25 : 1
Number of blades	7

**Fuel system**

Injection system	Indirect
Fuel injection pump	Cassette type
Fuel atomiser	Pintle nozzle
Nozzel opening pressure	29.0 Mpa
Fuel lift pump type	Mechanical
- flow / hour	63 I/h
- pressure	10 kPa
Maximum suction head	3m
- 1500 rev/min	

**Induction System**

Clean filter	3.0 kpa
Dirty filter	6.5 kpa
Air filter type	Dry

**Lubrication**

Total lub capacity	10.6 L
Sump minimum	8.9 L
Sump maximum	TBD
Maximum engine operating angels -front up, front down, right side or or left side	35 C
Lubricating oil pressure relief valve opens at maximum no-load speed	352-448 KPA
Oil consumption at full load as a % of fuel consumption	TBD

**Electrical System**

Type	Negative ground
Alternator voltage	12 volts
Alternator output	65 amps
Starter motor voltage	12 volts
Starter motor power	2 KW

**General installation**

Combustion air flow	1.74m / min
Exhaust gas temp	510 C
Exhaust gas flow, wet	5.8 m / min
Enginee coolant flow	55.2l/ min
Cooling fan air flow	0.4 KW

**Prime Power**