



# KGP20 GENSET

Generating Set Powered By Perkins **STAMFORD**

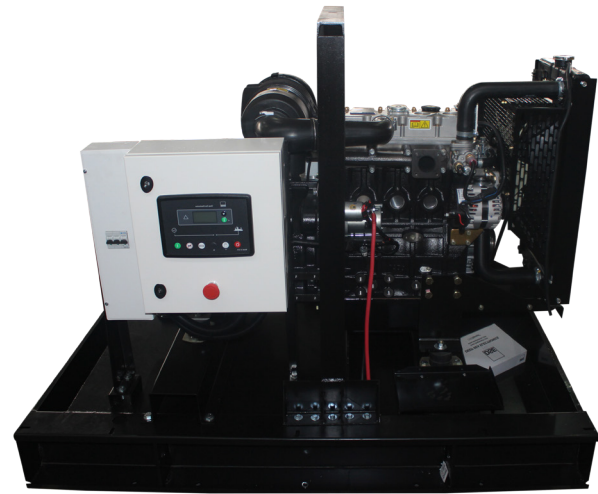


Image for illustration purposes only

## Output Ratings

Generating Set Model	Prime Power	Standby Power
1500rpm, 50 Hz / 400V	16KW <sub>e</sub> / 20KVA	18KW <sub>e</sub> / 22KVA
1800rpm, 60 Hz / 440V	-	-

## Genset Specifications

<b>Engine Make &amp; Model</b>	Perkins 404A-22G1		
<b>Origin</b>	UK		
<b>Alternator Type</b>	Stamford S0L2-G1		
<b>Control Panel</b>	Deap Sea - 6110		
<b>Circuit Breaker Type</b>	3 Pole MCB		
<b>Water Cooling System</b>			
<b>Mechanical Governor</b>			
<b>Electrical Stop Solenoid, Energized to Run</b>			
<b>Compact Size</b>			
<b>Fuel System</b>	<b>50%</b>	<b>75%</b>	<b>100%</b>
1500rpm, 50 Hz	2.9	4	5.3
1800rpm, 60Hz	-	-	-

\*Prime Power (l/hr)

## International Standards

Engine confirm to ISO 9001:2000, ISO 14001, ISO 10054, ISO 3046, BS 5514, DIN 6271. Alternator confirm to ISO 9001, ISO 14001, BS EN 60034, BS 5000, VDE 0530, NEMA MG1-32, IEC34 CSA C22.2-100, AS 1359, BS 6861 I, B En 61000-6-2:2001



## RATING GUIDELINES

**PRIME POWER** rating corresponds to ISO Standard Power for continuous operation. It is applicable for supplying electrical power at variable load for an unlimited number of hours instead of commercially purchased power. A10 % overload capability for governing purpose is available for this rating.

**MAXIMUM STANDBY POWER** rating corresponds to ISO Standard Fuel Stop Power. It is applicable for supplying standby electrical power at variable load in areas with well established electrical networks in the event of normal utility power failure. No overload capability is available for this rating. **1 hp = 1 kW x 1.36**

## Engine Technical Data

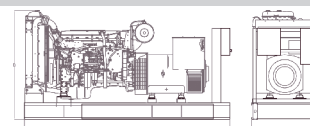
<b>No. of Cylinders / Alignment</b>	4 / In Line
<b>Cycle</b>	4 - Stroke
<b>Aspiration</b>	Naturally
<b>Injection</b>	Indirect
<b>Bore, mm</b>	84
<b>Stroke, mm</b>	100
<b>Displacement, l</b>	2.2 16
<b>Compression Ratio</b>	23.3:1
<b>Starting</b>	12V Electric
<b>Alternators, Amps</b>	12V/15A

## Alternator Technical Data

<b>No. of Bearings</b>	Single Bearing
<b>Insulation System</b>	Class H
<b>Excitation</b>	Self Excited
<b>Voltage Regulator</b>	AS540
<b>Protection</b>	IP23
<b>Temperature Rise, °C</b>	125
<b>Regulation</b>	±1.0%
<b>No. of Phases</b>	3
<b>No. of Poles</b>	4

## Dimensions & Weights

Length(m)	Width(m)	Height(m)	Weight(kg)	Tank Capacity(L)
1.45	0.52	1.25	460	44



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Performances	1500rpm	1800rpm
<b>Alternator Efficiency</b>	85.1%	-
<b>Engine Power</b>		
Prime Power, KWm(hp)	18.4(24.7)	-
Standby Power, KWm(hp)	20.3(27.2)	-
<b>Alternator</b>		
Prime Power, KW	16	-

Lubrication System	1500rpm	1800rpm
<b>Oil Consumption (l/hr)</b>	0.1% of fuel consumption	-
<b>Oil Sump Capacity, l</b>	10.6	-
<b>Oil System Capacity Include Filters, l</b>	-	-

Cooling System	1500rpm	1800rpm
<b>Heat Radiation from Engine and Alternator, Power KW</b>	4.4	-
<b>Heat Rejection to Coolant and Lube Oil at Standby Power, KW</b>	19.6	-
<b>Radiator Cooling Air Flow, m<sup>3</sup>/min (cfm)</b>	33 (1165)	-
<b>Coolant Capacity, l</b>	7	-

Intake & Exhaust System	1500rpm	1800rpm
<b>Air Flow Combustion at Standby Power, m<sup>3</sup>/min(cfm)</b>	1.45(51.2)	-
<b>Heat Rejection Exhaust at Standby Power, KW</b>	16.6	-
<b>Exhaust Gas Temperature at Standby °C</b>	505	-
<b>Max Allowable Back Pressure in Exhaust Line, Kpa</b>	10.2	-
<b>Exhaust Gas Flow at Standby Power, m<sup>3</sup>/min(cfm)</b>	3.94(139)	-

Accessories	
<b>Oil Drain</b>	<b>Anti-Vibration Pads</b>
<b>Stainless Steel Flexible</b>	<b>Fuel Tank Base Frame for 8hrs</b>
<b>Standard Silencer</b>	

## Control Panel Readings

- AC volts, AC currents, DC volts, frequency, rpm, hour counter, power factor.
- Low oil pressure, high water temperature, boost pressure and temperature, KW, KWh, KVA, KVAR
- Oil pressure, low oil level, high oil temperature
- DC alternator failure, over speed, over crank (Fail to start), over under voltage, over under current, any sensor failure
- Low coolant level - Configurable inputs&outputs
- Upgradable for GSM network connection, Signal SMS messages.

## Optional Equipment

- **Engine**
  - Coolant heater
  - Oversize batteries
  - Extra fuel pre-filter water separator
  - Battery Disconnect Switch
  - Electrical Governor
- **Alternator**
  - Excitation Boost System (EBS)
  - Upgrade to 3 phase sensing AVR
  - Qadrature droop kit
  - Anti-condensation heater
  - Air inlet filters
- **General**
  - Upgrade to modular controller for paralleling
  - Upgrade to 4 pole circuit breaker
  - Battery charger
  - Automatic transfer switch
  - Fuel level switch High / Low for alarm and control
  - Fuel transfer pump Automatic / Manual
  - Residential grade silencer
  - Weather protective and acoustic enclosure.

## Spare Parts Kit (Optional)

## Genuine - Perkins

Oil filter, full flow	(1)
Fuel filter	(1)
Air filter	(1)
Fan belt set	(1)
Alternator belt set	(1)

## General Information

### Documentation

Engine instruction book-English  
Alternator manual- English  
Wiring diagram

### Warranty

One year or 1000 thousand hours whichever elapsed first against all defects in material / or workmanship, subject to the terms and conditions of the Manufacturer's warranty.

