

20kW Perkins Diesel Generator Set

EPA Tier 4 Final




Perkins engine technical data

Engine Model	404D-22G
Number of Cylinders	4 cylinders Vertical in line
Cycle	4 stroke
Aspiration	Naturally
BorexStroke	84 mm x100 mm
Displacement	2.216 L
Compression ratio	23.3:1
Prime Power/Speed	22 KW/1800 RPM
Standby Power/Speed	24.3 KW/1800 RPM
Speed Governor	Mechanical
Cooling System	Forced water cooling cycle
Steady speed droop	≤1%
Total lubrication system capacity	10.6 L
Coolant capacity (engine only)	7 L
Fuel Consumption at 50% Load	3.5 L/H (at 1800RPM)
Fuel Consumption at 75% Load	4.8 L/H (at 1800RPM)
Fuel Consumption at 100% Load	6.2 L/H (at 1800RPM)
Starter Motor	DC12V
Alternator	DC12V

Stamford alternator technical data

Alternator Model	PI144D
Rated power	20KW
Frequency/speed	60HZ/1800rpm
Exciter type	Single bearing, Brushless, Self-excited
Power factor	1
Voltage adjust range	≥5%
Voltage regulation NL-FL	≤ ± 1%
Insulation Grade	H
Protection Grade	IP23
Phase	Single phase

SmartGen control panel data

Model	HGM6110
<p>Standard Digital Readouts: Generator voltage; Output frequency; Engine speed; Battery voltage; Engine hours run.</p> <p>Failure indicators: Overspeed/underspeed, Emergency stop Low oil pressure; High water temperature Failure to start Battery charger failure</p> <p>Automatic shutdown occurs under: Low engine oil pressure; High engine water temperature; Overspeed/underspeed; Failure to start after three attempts.</p>	 <p>The image shows the SmartGen Genset Controller HGM6110. It is a black rectangular device with a central LCD screen. To the left of the screen are 'Alarm' and 'Status' indicators. To the right are navigation buttons (up, down, left, right) and an 'Ok' button. Below the screen are several control buttons: 'Close' (green), 'Open' (red), 'Auto' (white), 'Manual' (white), 'Start' (green), and 'Stop' (red). There are also 'Load' and 'Genset' status indicators on the left side.</p>

Accessories	Open type	Silent type
Sound-proof & Weather-proof Canopy	Optional	Standard
Daily base fuel tank. 8 hours capacity	Optional	Optional
Intelligent LED display control panel	√	√
Speed governor	√	√
Electric start and 24v charger	√	√
Standard air filter, oil filter, fuel filter	√	√
Cooling water tank	√	√
High-efficient silencer.	√	√
Exhaust elbow	√	√
Storage battery	√	√
Steel base-frame against vibration	√	√
Operation& Maintenance manual.	√	√