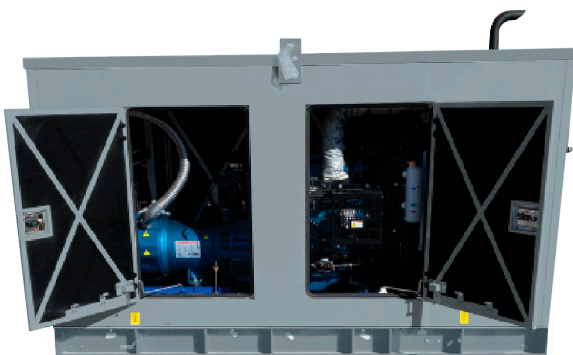




WILDCAT
POWER GEN

The Sentinel UL 100A Diesel Generator Set

RATINGS / OPTIONS	WILDCAT DIESEL GENERATOR			
	71	100A	100B	100C
Kirloskar Engine	4K1080TA1	4K1080TA1	4K1080TA1	4K1080TA1
Engine Capacity / Induction System	4.33 L / Turbocharged Charge air-cooled	4.33 L / Turbocharged Charge air-cooled	4.33 L / Turbocharged Charge air-cooled	4.33 L / Turbocharged Charge air-cooled
Engine Rating HP @ RPM	156 @ 1,800	156 @ 1,800	156 @ 1,800	156 @ 1,800
Stamford Alternator UL1004 Listed	UCI274D	UCI274D	UCI274D	UCI274D
Rated kVA	71	125	125	125
Rated kWe	71	100	100	100
Number of Phases	1	3	3	3
Rating Power Factor	1	0.8	0.8	0.8
Rated Voltage V	120/240	120/208	277/480	120/240
Rated Current Amps	296	347	150	301
3-pole Circuit Breaker Size in Amps, UL Listed	Any UL Listed 3-pole breaker with rating of 100%–125% of rated current of the respective rating			
Controller Options UL Listed	Deep Sea	Deep Sea	Deep Sea	Deep Sea
Standard Diesel Tank Capacity	8 hours	8 hours	8 hours	8 hours
Length	137.8 in. (3,500 mm)	137.8 in. (3,500 mm)	137.8 in. (3,500 mm)	137.8 in. (3,500 mm)
Width	44.6 in. (1,133 mm)	44.6 in. (1,133 mm)	44.6 in. (1,133 mm)	44.6 in. (1,133 mm)
Height	79.3 in. (2,014.4 mm)	79.3 in. (2,014.4 mm)	79.3 in. (2,014.4 mm)	79.3 in. (2,014.4 mm)





The Sentinel UL 100A

Features and Specifications

Features

- Extremely reliable
- Lower operating cost
- Easy maintenance – higher uptime
- Sound attenuated enclosure is fully integrated and designed for all weather conditions – weatherproof
- Smart battery charger
- Isochronous electronic governor
- State-of-the-art generating set control system with high degree of accuracy and reliability
- Ideally suitable for critical industries like Construction, Manufacturing, Textile, Services, etc.
- Superior design standards that minimize power deration even at high ambient temperatures
- Prompt and efficient after-sales service

CONTROL SYSTEM	
Manufacturer	Deep Sea
Model	DSE 7310
Digital Display Instrumentation	<ul style="list-style-type: none"> • Generator voltage • Generator amps • Generator frequency • Mains voltage • Battery voltage • Engine hours run • Oil pressure gauge • Engine temperature gauge • Fuel level
Shutdowns/Safeties	<ul style="list-style-type: none"> • Fail to stop • Low oil pressure • High engine temperature • Under/overspeed • Under/overvoltage • Emergency stop • Failed to reach loading voltage • Failed to reach loading frequency • Charge fail • Overcurrent • Low DC voltage warning • Low coolant level

ENGINE TECHNICAL DATA	
Manufacturer	Kirloskar
Model	4K1080TA1
Number of Cylinders	4
Configuration	Inline
Type	Four-stroke
Bore x Stroke (mm)	105 X 125
Displacement	4.3 L
Induction System	Turbocharged and charge air-cooled
Compression Ratio	15.5±1 : 1
Starting Arrangement	12V electric





The Sentinel UL 100A

Technical Specifications

ALTERNATOR TECHNICAL DATA	
Manufacturer	Stamford
Type	4-pole, rotating field
Exciter Type	Brushless, wound field
Leads Type/Quantity	Reconnectable, 12
Voltage Regulator	Solid state, volts/Hz
Insulation	NEMA MG1 - 32
Insulation Material	Class H
Insulation Temp. Increase	150°C, standby
Bearing Type/Quantity	Sealed, 1
Coupling	Flexible disc
Voltage Regulation, No-load to Full-load	Controller-dependent
One-step Load Acceptance	100% of rating
Unbalanced Load Capability	100% of rated standby current





The Sentinel UL 100A

Technical Specifications

ENGINE MODEL NO. 4K1080TA1	
Gross Engine Power (Standby at 1,800 RPM)	114.7 kWm
Rated Brake Power Gross Power Output (Production Tolerance: $\pm 5\%$)	156 hp (114.7 kW)
Mean Piston Speed	7.5 m/s
Combustion Air Flow	685 kg/hr
Exhaust Gas Flow Max.	756 kg/hr
Exhaust Gas Temperature Max.	1,256°F (680°C)
Exhaust Temperature Max. (at Exhaust Turbine Outlet)	1022°F (550°C)
Cooling System	
Coolant Capacity with Radiator	16 L
Exhaust System	
Max. Allowable Back Pressure of Exhaust System at Rated Power (at Exhaust Manifold Outlet)	37 mm Hg
Max. Allowable Back Pressure of Exhaust System at Rated Power (at Exhaust Diffuser Outlet)	4.9 \pm 1 kPa G
Exhaust Outlet Pipe Inner Diameter	104 mm
Lubrication System	
Sump Max.	11.5 L
Fuel Consumption*	
100%	30 L/hr
75%	22.6 L/hr
50%	15.5 L/hr
25%	8.6 L/hr
Electrical System	
Charging Alternator Output Current	35 amps
Starter Motor Voltage	12 VDC
Battery Capacity/ Requirement (CCA)	600 CCA @ 32°F (0°C)

* **NOTE:** Corresponding to gross power under NTP conditions after 50 hours of running in with reference fuel. Fuel consumption readings are based on diesel fuel with a specific gravity of 0.854 and confirming to BS 2869, Class A2 Production Tolerance: +5%.