

The Sentinel UL 60A **Diesel Generator Set**

60A / 49

RATINGS / OPTIONS	WILDCAT DIESEL GENERATOR			
	49	60A	60B	60C
Kirloskar Engine	4R810TA1	4R810TA1	4R810TA1	4R810TA1
Engine Capacity / Induction System	3.24 L / Turbocharged Chargeair- cooled	3.24 L / Turbocharged Charge air- cooled	3.24 L / Turbocharged Charge air- cooled	3.24 L / Turbocharged Charge air- cooled
Engine Rating HP @ RPM	95 @ 1,800	95 @ 1,800	95 @ 1,800	95 @ 1,800
Stamford Alternator UL1004 Listed	UCI224F	UCI224F	UCI224F	UCI224F
Rated kVA	49	75	75	75
Rated kWe	49	60	60	60
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	204	208	90	180
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	108.2 in. (2,750 mm)	108.2 in. (2,750 mm)	108.2 in. (2,750 mm)	108.2 in. (2,750 mm)
Width	42.6 in. (1,083 mm)	42.6 in. (1,083 mm)	42.6 in. (1,083 mm)	42.6 in. (1,083 mm)
Height	63 in. (1,601 mm)	63 in. (1,601 mm)	63 in. (1,601 mm)	63 in. (1,601 mm)







The Sentinel UL 60A

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

CONTRO	L SYSTEM	
Manufacturer	Deep Sea	
Model	DSE 7310	
Digital Display Instrumentation	 Generator voltage Generator amps Generator frequency Mains voltage Battery voltage Engine hours run Oil pressure gauge Engine temperature gauge Fuel level 	
Shutdowns/ Safeties	 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	4R810TA1	
Number of Cylinders	4	
Configuration	Inline	
Туре	Four-stroke	
Bore x Stroke (mm)	96 X 112	
Displacement	3.24 L	
Induction System	Turbocharged and charge air-cooled	
Compression Ratio	18:1	
Starting Arrangement	12V electric	







ALTERNATOR TECHNICAL DATA		
Manufacturer	Stamford	
Туре	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 60A Technical Specifications

ENGINE MODEL	NO. 4R810TA1			
Gross Engine Power				
(Standby at 1,800 RPM)	69.7 kWm			
Mean Piston Speed	6.72 m/s			
Engine Coolant Flow	125 L/min			
Combustion Air Flow	424 kg/hr			
Exhaust Gas Flow Max.	440 kg/hr			
Exhaust Gas Temperature Max.	1,022 °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)	75 mm Hg			
Exhaust Outlet Pipe Inner Diameter	69 mm			
Lubrication System				
Sump Max.	11.5 L			
Fuel Consu	umption*			
100%	18.7 L/hr			
75%	13.9 L/hr			
50%	9.5 L/hr			
25%	5.3 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%.