

RC185D-T3

Power Generation, Inc.

Mobile Prime Generators

Key Features

- Manufactured in Greensboro, North Carolina, USA.
- Heavy duty generator system designed for prime power operation in rental, construction and special events applica tions.

Skidbase and Enclosure

- Package foundation is a heavy duty, oilfield-ready skidbase designed with minimum 110% environmental containment to prevent any leakage of fuel, oil, or coolant.
- Optimized package design combines low noise levels with small footprint and full load performance capability in high ambient temperatures.
- The enclosure is coated with a 2 part epoxy over the zinc plated steel for superior corrosion resistance and a high gloss powder paint for long life.
- Wide opening side access doors are hinged, providing easy access and are equipped with recessed, padlockable handles.
- Package is equipped with a center-point lifting eye for safe, well-balanced hoisting, designed with a 5 x safety factor for the weight of a fully fueled unit with running gear.

Engine and Cooling System

- Industrial, heavy-duty diesel engine is emissions certified to current EPA requirements and provides optimum mix of performance and fuel economy.
- Electronically controlled engine provides isochronous frequency control and advanced diagnostic monitoring and protection.
- · Oversized cooling system rated for high ambient tempera-

ture (minimum 40°C/104°F) operation without de-rating.

- The engine generator assembly is mounted on fail-safe vibration isolators.
- Coolant and oil drains are piped to bulkhead fittings mounted on the enclosure and all filters and maintenance points are easily accessed for safe and easy servicing.
- Engines are globally supported by the engine OEM and Clarke Power Generation, Inc.



Generator

- Leroy Somer alternators feature AREP brushless excitation providing industry leading motor starting kVA and 300% overload capability.
- Class H insulation with upgraded environmental coating for ultimate resistance to high temperature and humidity.
- Three position Voltage Selector Switch (VSS) to easily configure the units for operation at most common voltages.

Voltage /		Armature		_		
Frequency	P.F.	Connection	Rating	Amps	kW	kVA
480V-3Ø-60Hz	0.8	Series Wye	Prime	220	146	183
			Standby	242	161	201
240V-3Ø-60Hz	0.8	Parallel Wye	Prime	439	146	183
			Standby	483	161	201
208V-3Ø-60Hz	0.8	Parallel Wye	Prime	500	144	180
			Standby	550	158	198
240V-1Ø-60Hz	1.0	Zig-Zag	Prime	458	110	110
			Standby	504	121	121
120V-1Ø-60Hz	1.0	Zig-Zag	Prime	458 × 2	110	110
			Standby	504 × 2	121	121

Control System

- Digital control provide at-a-glance monitoring and simple access of vital engine and generator parameters. Micro-processor-controlled startup at the push of a button and protects the generator system from an array of faults while providing the operator with clear communication.
- Engine fault codes are displayed on the main LCD display, providing operators and technicians with a numeric and text explanation of the fault code, minimizing the need for expensive hand-held code scanners.
- Standard remote Auto Start / Stop capability via two wire, closed contact logic, allows for connection to automatic transfer switchgear and other remote starting devices.
- Industry exclusive Voltage Selector Switch (VSS) protection feature prevents switching the VSS while generator is operating.
- Battery disconnect switch is mounted inside the enclosure.

Power Connections

- All controls and connection points are grouped at the rear of the unit for safety and operator convenience.
- Power cables are connected at an oversized five lug (L1 L2 L3 N PE) terminal board capable of accepting bare end cable or terminated cables.
- Convenience receptacle panel includes individual branch circuit breakers.

Fuel System

- Single fuel tank sized for 24 hour runtime is mounted within the skid base, providing double wall protection.
- Fuel tank mounted low in frame and centered to ensure balanced lifting and low center of gravity.
- The fuel filler is located within the containment basin, minimizing possible spillage.

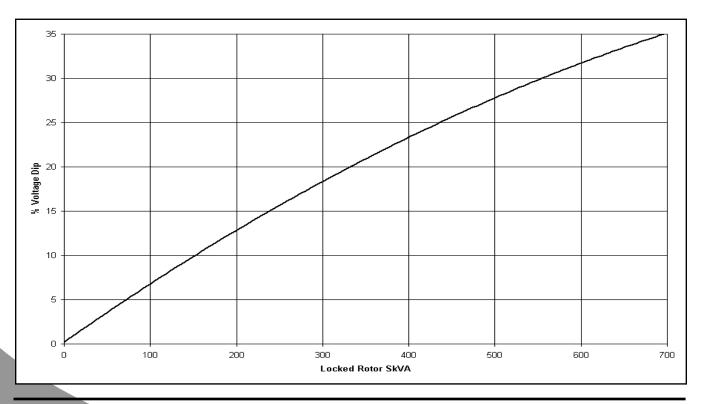
- Standard Racor-style fuel / water separator and fine micron secondary fuel filter keep contaminates out of the system and increase reliability.
- The containment system features a three-inch drain plug for easy cleaning, and the fuel tank has a drain plug mounted behind the containment plug.
- Leak-proof fuel vents eliminate the potential for fuel purge during out-of-level conditions during transport and load / unload.
- Low fuel shutdown ensures the engines will not lose prime if they run out of fuel.

Running Gear

- Integrated running gear system mounts directly to generator skidbase providing an industry-best low center of gravity for safe, stable towing, on-road or off-road.
- Tandem axle torsion suspension with E-Z-Lube hub assemblies and electric brakes.
- All models feature high quality, grommet-mount lighting and meet Federal Motor Vehicle Safety Standards for lighting and conspicuity.
- Trailer-to-vehicle connector is a 6-pole round plug with a high quality, jacketed wiring harness.
- All units are equipped with a 3-inch pintle eye, wheel chocks and a high quality, heavy-duty jack stand.

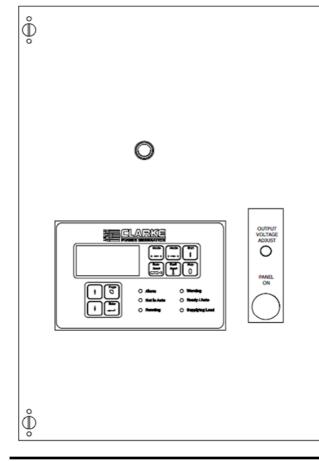
Warranty

- All models are covered by a comprehensive limited warranty:
- Package: 1 year / 2000 hours
- John Deere Engine: 1 year / unlimited hours or 2 years / 4000 hours
- Leroy Somer Alternator: 2 years / 4000 hours



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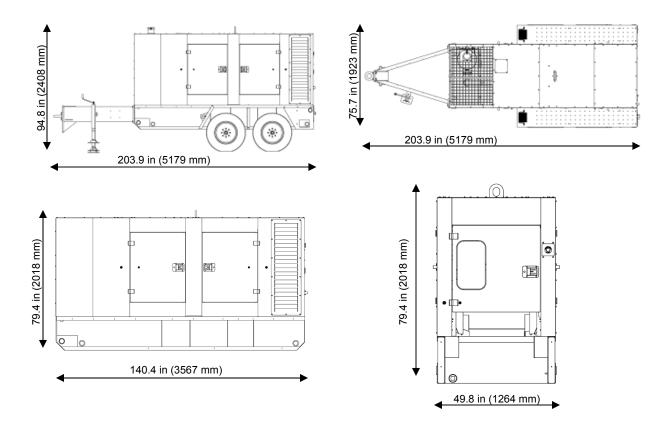
Engine Data				
Engine Manufacturer	John Deere			
Model Number	6068HF285			
Prime Output @ Rated Speed	216 HP	161 kWm		
Standby Output @ Rated Speed	237 HP	177 kWm		
Engine Type	Inline 4-cycle			
Engine Control	ECU			
Emissions Certification	EPA Tier 3			
Number of Cylinders	6			
Aspiration	Turbocharged / Intercooled			
Bore × Stroke	4.2 × 5.0 in	106 × 127 mm		
Displacement	415 in ³	6.8 L		
Compression Ratio	19 : 1			
Governor Type	Electronic / Isochronous			
Speed Regulation Accuracy	+ / - 0.25% Steady State			
Single Step Load Acceptance	100%			
Cooling System	50% Glycol / 50% Water			
Charging Alternator Output	65 A			
DC System Voltage	12 V			
Battery Output	1000 CCA			



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Fluid Capacitie	s	Gal	L	
Oil Sump Capac	city	8.6	32.6	
Cooling System	Capacity	9.0	34.1	
Usable Fuel Cel	l Capacity	253.7	960.4	
Fuel Consumption	Gal / h	L/h	Runtime	
@ 25% Load	3.10	11.73	81.8	
@ 50% Load	5.63	21.31	45.1	
@ 75% Load	8.45	31.99	30.0	
@ 100% Load	10.94	41.41	23.2	
Alternator Data	l			
Alternator Manu	facturer	Leroy Somer		
Alternator Mode	l	LSA 442 L12		
Alternator Type		Four Pole Revolving Field		
Number of Lead	s	12		
Insulation Class		н		
Frequency		60 Hz		
Available Voltag	es—3Ø	208 / 240 / 416 / 480 V		
Available Voltag	es—1Ø	120 / 139 / 240 / 277 V		
Voltage Connect	tion Method	3-Position Selector Switch		
Excitation Metho	bd	Brushless with AREP		
Voltage Regulat	or Model	R438		
Voltage Regulat	ion Accuracy	+ / - 0.5% Steady State		
Total Harmonic	Distortion (THD)	<5% @ No Load		
Telephone Influe	ence Factor (TIF)	<50		
Power Connect	tions		Qty	
20A—125V GF0 (NEMA 5-20R)	CI Duplex		2	
50A—125/250V (CS6369)	Temp Power	×13 • 14	3	
Terminal Board Maximum Cable Size (Bare Wire)		1000 MCM		
Terminal Board Maximum Cable Size (Lugged)		1000 MCM		
Reference Conditions				
Rated Ambient	Temperature	10°-104°F	-12°-40°C	
Minimum Startin	g Temperature (S	tandard)	10°F (-12°C)	
Minimum Startin	g Temperature (w	/ Cold Start Opt)	0°F (-18°C)	
Rated Altitude				
Temperature De	e-rate Factor			
Altitude De-rate	Factor			

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Running Gear	To 49CFR571 requirements				
Configuration	Tandem axle				
Suspension	Torsion bar				
Standard Brake System Configuration	Electric				
Tires	9.50-16.5 LT/E				
Wheels	16.5" × 6.75" (419 mm × 171 mm), 8 lug on 6.5" (165 mm) bolt circle				
Lighting and Reflectors	Meets FMVSS 571.108 requirements				
Electrical Connection to Towing Vehicle	Six pole round plug				
Standard Coupling Connection	3" (76 mm) Pintle eye				
Hitch Height	21-25.5-30-34.5 in	533-648-762-876 mm			
Safety Chains	2 × 3/8" (10 mm) Chains with slip hooks and safety latches				
Jack Stand Configuration	5,000lb (2,268 kg) Capacity, top wind with sand shoe, trunion mounted				
Weights & Dimensions (w/ Running Gear)					
Length	203.9 in	5,179 mm			
Width	75.7 in	1,923 mm			
Height	94.8 in	2,408 mm			
Weight (Shipping)	7,205 lb	3,268 kg			
Weight (Ready to Run)	9,166 lb	4,158 kg			
Weights & Dimensions (Less Running Gear)					
Length	140.4 in	3,567 mm			
Width	49.8 in	1,264 mm			
Height	79.4 in	2,018 mm			
Weight (Shipping)	5,891 lb	2,672 kg			
Weight (Ready to Run)	7,852 lb	3,562 kg			
Sound Level @ 23ft (7m), 100% Load	68 dB(A)				





Due to continuous product improvement, specifications subject to change without notice.

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