

RC115D-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 applications.

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, pad-lockable 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	140	93	116
			Standby	155	103	129
240V-3Ø-60Hz	0.8	Parallel Wye	Prime	277	93	116
			Standby	310	103	129
208V-3Ø-60Hz	0.8	Parallel Wye	Prime	202	93	116
			Standby	358	103	129
240V-1Ø-60Hz	1.0	Zig-Zag	Prime	304	73	73
			Standby	338	81	81
120V-1Ø-60Hz	1.0	Zig-Zag	Prime	304 × 2	73	73
			Standby	338 × 2	81	81

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 choice of electric or hydraulic surge 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	4045HF285				
Prime Output @ Rated Speed	144 HP	107 kWm			
Standby Output @ Rated Speed	158 HP	118 kWm			
Engine Type	Inline 4-cycle				
Engine Control	ECU				
Emissions Certification	EPA Tier 3				
Number of Cylinders	4				
Aspiration	Turbocharged / Intercooled				
Bore × Stroke	4.2 × 5.0 in	106 × 127 mm			
Displacement	275 in ³	4.5 L			
Compression Ratio	17 : 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	70 A				
DC System Voltage	12 V				
Battery Output	1000 CCA				



Fluid Capacities	s	Gal	L		
Oil Sump Capac	ity	3.57	13.5		
Cooling System	Capacity	7.5	28.4		
Usable Fuel Cell	I Capacity	171.6	649.6		
Fuel Consumption	Gal / h	L / h	Runtime		
@ 25% Load	2.3	8.7	74.6		
@ 50% Load	4.3	16.3	39.9		
@ 75% Load	6.0	22.7	28.6		
@ 100% Load	7.5	28.4	22.9		
Alternator Data					
Alternator Manua	facturer	Leroy Somer			
Alternator Mode	l	LSA 442 S7			
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	od	Brushless with AREP			
Voltage Regulate	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	ions		Qty		
20A—125V GF0 (NEMA 5-20R)	CI Duplex		2		
50A—125/250V (CS6369)	Temp Power	THE SECOND	3		
Terminal Board Maximum Cable Size (Bare Wire)		350 MCM			
Terminal Board Size (Lugged)	Maximum Cable	350 MCM			
Reference Con	Reference Conditions				
Rated Ambient 1	Femperature	10°-104°F	-12°-40°C		
Minimum Startin	g Temperature (S	tandard)	10ºF (-12ºC)		
Minimum Startin	g Temperature (w	/ Cold Start Opt)	0°F (-18°C)		
Rated Altitude					
Temperature De	-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 (hydraulic surge brakes optional)					
Tires	ST205/75D15					
Wheels	15" × 6" (381 mm × 152 mm), 6 lug on 5.5" (140 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 (2-5/16" (59 mm) ball coupler optional)					
Hitch Height	20-22-24-26-28 in	508-559-610-660-711 mm				
Safety Chains	2 × 5/16" (8 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	165.8 in	4,212 mm				
Width	71.7 in	1,820 mm				
Height	83.6 in	2,123 mm				
Weight (Shipping)	5,758 lb	2,612 kg				
Weight (Ready to Run)	7,220 lb	3,275 kg				
Weights & Dimensions (Less Running Gear)						
Length	107.1 in	2,721 mm				
Width	47.8 in	1,214 mm				
Height	69.4 in	1,764 mm				
Weight (Shipping)	4,865 lb	2,207 kg				
Weight (Ready to Run)	6,327 lb	2,870 kg				
Sound Level @ 23ft (7m), 100% Load	71 dB(A)					









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