

# G290WCU-3B-T3

Mobile Generators

#### **Key Features**

- Manufactured in Statesville, North Carolina, USA.
- Heavy duty generator system designed for prime power operation in rental, construction and special events applications.
- Generator is CSA certified for electrical equipment per C22.2, No. 14.

#### Skidbase and Enclosure

- Package foundation is a heavy duty, oilfieldready 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 13 stage paint process including E-coat primer 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**

- Dual frequency: Easily selectable between 50Hz and 60Hz.
- Industrial, heavy-duty diesel engine is emissions certified to current EPA and CARB 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 temperature (minimum 40°C/104°F) operation without de-rating.

- Dual Frequency
  - 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 Doosan Portable Power.

#### 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.
- Reconnection link board to easily configure the units for operation at most common voltages.

#### **Control System**

• Operator-preferred analog gauges provide at-a-glance monitoring of vital engine and generator parameters.

Voltage / Frequency	P.F.	Armature Connection	Rating	Amps	kW	kVA
480V-3Ø-60Hz	0.9	Series Wye	Prime	349	232	290
	0.8		Standby	384	255	319
240V-3Ø-60Hz	0.8	Parallel Wye	Prime	698	232	290
			Standby	768	255	319
208V-3Ø-60Hz		Parallel Wye	Prime	805	232	290
	0.8		Standby	886	255	319
240V-1Ø-60Hz	1.0	Series Wye	Prime	322	232	232
		(4-wire)	Standby	354	255	255
120V-1Ø-60Hz	1.0	Parallel Wye	Prime	644	232	232
		(4-wire)	Standby	708	255	255
400V-3Ø-50Hz	0.8	Series Wye	Prime	373	207	259
			Standby	411	228	285

- Solid state engine control module provides convenient, microprocessor-controlled startup at the push of a button and protects the generator system from an array of faults while providing the operator with indication of any faults on the LED display.
- Engine fault codes are displayed on an 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.
- 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.

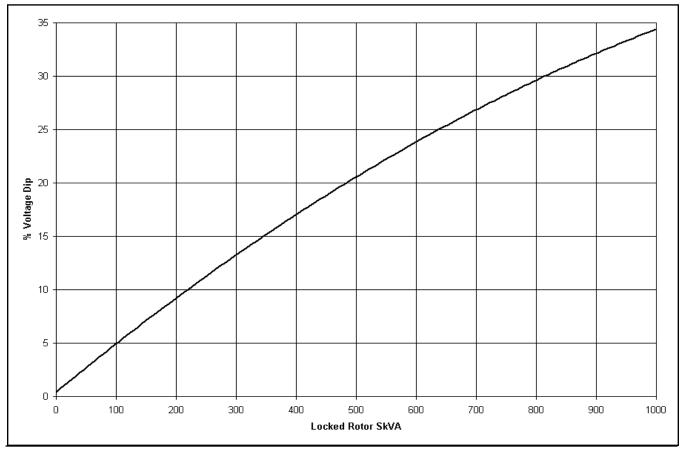
- The containment system features a three-inch drain plug for easy cleaning, and the fuel tank has a drain plug mounted behind the containment plug.
- Leak-proof fuel vents eliminate the potential for fuel purge during out-of-level conditions during transport and load / unload.
- Low fuel shutdown ensures 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

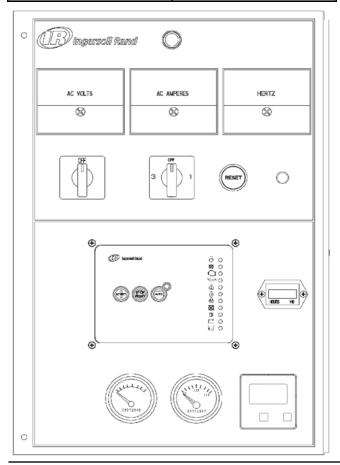
- All models are covered by a comprehensive limited warranty:
- Package: 1 year / 2000 hours
- Cummins Engine: 1 year / unlimited hours
- Leroy Somer Alternator: 2 years / 4000 hours



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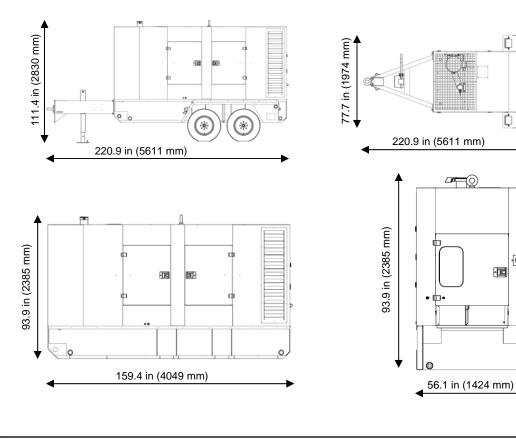
Engine Data				
Engine Manufacturer	Cummins			
Model Number	QSL9-G3			
Prime Output @ Rated Speed	352 HP	262 kWm		
Standby Output @ Rated Speed	399 HP	297 kWm		
Engine Type	Inline 4-cycle			
Engine Control	ECU			
Emissions Certification	EPA Tier 3			
Number of Cylinders	6			
Aspiration	Turbocharged / Intercooled			
Bore × Stroke	4.5 × 5.7 in	114 × 145 mm		
Displacement	543 in <sup>3</sup>	8.8 L		
Compression Ratio	16.8 : 1			
Governor Type	Electronic / Isochronous			
Speed Regulation Accuracy + / - 0.25% Steady S		Steady State		
Single Step Load Acceptance	100%			
Cooling System	50% Glycol / 50% Water			
Charging Alternator Output	35 A			
DC System Voltage	24 V			
Battery Output	2 × 1000 CCA			



Oil Sump Capacity7.026.5Cooling System Capacity9.034.1Usable Fuel Cell Capacity386.01461.2Fuel ConsumptionGal / hL / hRuntime@ 25% Load5.621.268.9@ 50% Load10.840.935.7@ 75% Load15.257.325.4@ 100% Load18.570.020.9Alternator Data18.570.020.9Alternator ManufacturerLeroy SomerAlternator ModelLSA 462 L9Alternator TypeFour Pole Revolving FieldNumber of Leads12Insulation ClassHFrequency50 / 60 HzAvailable Voltages—1Ø120 / 139 / 240 / 277 VVoltage Connection MethodBuss Bar ReconnectableExcitation MethodBuss Bar ReconnectableExcitation MethodR448Voltage Regulator ModelR448Voltage Regulator Accuracy+ / - 0.5% Steady StateTotal Harmonic Distortion (THD)<50Power ConnectionsQty	Fluid Capacities	5	Gal	L	
Cooling System Capacity9.034.1Usable Fuel Cell Capacity386.01461.2Fuel ConsumptionGal / hL / hRuntime@ 25% Load5.621.268.9@ 50% Load10.840.935.7@ 75% Load15.257.325.4@ 100% Load18.570.020.9Alternator Data141.570.020.9Alternator ManufacturerLeroy SomerAlternator ModelLSA 462 L9Alternator TypeFour Pole Revolving FieldNumber of Leads12Insulation ClassHFrequency50 / 60 HzAvailable Voltages—3Ø208 / 240 / 416 / 480 VAvailable Voltages—1Ø120 / 139 / 240 / 277 VVoltage Connection MethodBuss Bar ReconnectableExcitation MethodBrushless with AREPVoltage Regulator ModelR448Voltage Regulation Accuracy+ / - 0.5% Steady StateTotal Harmonic Distortion (THD)<50	-			_	
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Fuel ConsumptionGal / hL / hRuntime@ 25% Load5.621.268.9@ 50% Load10.840.935.7@ 75% Load15.257.325.4@ 100% Load18.570.020.9Alternator DataAlternator ManufacturerLeroy SomerAlternator ModelLSA 462 L9Alternator TypeFour Pole Revolving FieldNumber of Leads12Insulation ClassHFrequency50 / 60 HzAvailable Voltages—3Ø208 / 240 / 416 / 480 VAvailable Voltages—1Ø120 / 139 / 240 / 277 VVoltage Connection MethodBuss Bar ReconnectableExcitation MethodBrushless with AREPVoltage Regulator ModelR448Voltage Regulation Accuracy+ / - 0.5% Steady StateTotal Harmonic Distortion (THD)<5% @ No Load				-	
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@ 75% Load 15.2 57.3 25.4   @ 100% Load 18.5 70.0 20.9   Alternator Data  18.5 70.0 20.9   Alternator Data  Leroy Somer   Alternator Manufacturer Leroy Somer    Alternator Model LSA 462 L9    Alternator Type Four Pole Revolving Field   Number of Leads 12   Insulation Class H   Frequency 50 / 60 Hz   Available Voltages—3Ø 208 / 240 / 416 / 480 V   Available Voltages—1Ø 120 / 139 / 240 / 277 V   Voltage Connection Method Buss Bar Reconnectable   Excitation Method Brushless with AREP   Voltage Regulator Model R448   Voltage Regulator Accuracy + / - 0.5% Steady State   Total Harmonic Distortion (THD) <5% @ No Load	@ 25% Load	5.6	21.2	68.9	
Image: Constraint of the constra	@ 50% Load	10.8	40.9	35.7	
Alternator DataAlternator ManufacturerLeroy SomerAlternator ModelLSA 462 L9Alternator TypeFour Pole Revolving FieldNumber of Leads12Insulation ClassHFrequency50 / 60 HzAvailable Voltages—3Ø208 / 240 / 416 / 480 VAvailable Voltages—1Ø120 / 139 / 240 / 277 VVoltage Connection MethodBuss Bar ReconnectableExcitation MethodBrushless with AREPVoltage Regulator ModelR448Voltage Regulation Accuracy+ / - 0.5% Steady StateTotal Harmonic Distortion (THD)<5% @ No Load	@ 75% Load	15.2	57.3	25.4	
Alternator ManufacturerLeroy SomerAlternator ModelLSA 462 L9Alternator TypeFour Pole Revolving FieldNumber of Leads12Insulation ClassHFrequency50 / 60 HzAvailable Voltages—3Ø208 / 240 / 416 / 480 VAvailable Voltages—1Ø120 / 139 / 240 / 277 VVoltage Connection MethodBuss Bar ReconnectableExcitation MethodBrushless with AREPVoltage Regulator ModelR448Voltage Regulation Accuracy+ / - 0.5% Steady StateTotal Harmonic Distortion (THD)<5% @ No Load	@ 100% Load	18.5	70.0	20.9	
Alternator ModelLSA 462 L9Alternator TypeFour Pole Revolving FieldNumber of Leads12Insulation ClassHFrequency50 / 60 HzAvailable Voltages—3Ø208 / 240 / 416 / 480 VAvailable Voltages—1Ø120 / 139 / 240 / 277 VVoltage Connection MethodBuss Bar ReconnectableExcitation MethodBrushless with AREPVoltage Regulator ModelR448Voltage Regulation Accuracy+ / - 0.5% Steady StateTotal Harmonic Distortion (THD)<5% @ No Load	Alternator Data				
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Available Voltages—3Ø208 / 240 / 416 / 480 VAvailable Voltages—1Ø120 / 139 / 240 / 277 VVoltage Connection MethodBuss Bar ReconnectableExcitation MethodBrushless with AREPVoltage Regulator ModelR448Voltage Regulation Accuracy+ / - 0.5% Steady StateTotal Harmonic Distortion (THD)<5% @ No Load	Insulation Class		Н		
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Voltage Connection MethodBuss Bar ReconnectableExcitation MethodBrushless with AREPVoltage Regulator ModelR448Voltage Regulation Accuracy+ / - 0.5% Steady StateTotal Harmonic Distortion (THD)<5% @ No Load	Available Voltage	es—3Ø	208 / 240 / 416 / 480 V		
Excitation Method Brushless with AREP   Voltage Regulator Model R448   Voltage Regulation Accuracy + / - 0.5% Steady State   Total Harmonic Distortion (THD) <5% @ No Load	Available Voltage	əs—1Ø	120 / 139 / 240 / 277 V		
Voltage Regulator Model R448   Voltage Regulation Accuracy + / - 0.5% Steady State   Total Harmonic Distortion (THD) <5% @ No Load	Voltage Connect	ion Method	Buss Bar Reconnectable		
Voltage Regulation Accuracy + / - 0.5% Steady State   Total Harmonic Distortion (THD) <5% @ No Load	Excitation Metho	d	Brushless with AREP		
Total Harmonic Distortion (THD) <5% @ No Load	Voltage Regulate	or Model	R4	48	
Telephone Influence Factor (TIF) <50	Voltage Regulati	on Accuracy	+ / - 0.5% Steady State		
	Total Harmonic I	Distortion (THD)	<5% @ No Load		
Power Connections Qty	Telephone Influe	nce Factor (TIF)	<50		
	Power Connect	ions		Qty	
20A—125V GFCI Duplex (NEMA 5-20R) 2				2	
50A—125/250V Temp Power (CS6369) 3			No. Contraction of the second	3	
Terminal Board Maximum Cable Size (Bare Wire) 1000 MCM			1000 MCM		
Terminal Board Maximum Cable Size (Lugged) 1000 MCM		Vaximum Cable	1000 MCM		
Reference Conditions					
Rated Ambient Temperature 10°-104°F -12°-40°C	Rated Ambient T	emperature	10º-104ºF	-12º-40ºC	
Minimum Starting Temperature (Standard) 10°F (-12°C)	Minimum Startin	g Temperature (S	tandard)	10ºF (-12ºC)	
Minimum Starting Temperature (w/ Cold Start Opt) 0°F (-18°C)	Minimum Startin	g Temperature (w	/ Cold Start Opt)	0°F (-18°C)	
Rated Altitude	Rated Altitude				
Temperature De-rate Factor	Temperature De	-rate Factor			
Altitude De-rate Factor	Altitude De-rate	Factor			

### G290WCU-3B-T3 Mobile Generators

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	22-26.5-31-35.5 in	559-673-787-902 mm			
Safety Chains	2 x 3/8" (10 mm) Chains with slip hooks and safety latches				
Jack Stand Configuration	10,000lb (4,536 kg) Capacity, top wind with sand shoe, fixed mount				
Weights & Dimensions (w/ Running Gear)					
Length	220.9 in	5,611 mm			
Width	77.7 in	1,974 mm			
Height	111.4 in	2,830 mm			
Weight (Shipping)	8,998 lb	4,081 kg			
Weight (Ready to Run)	11,957 lb	5,424 kg			
Weights & Dimensions (Less Running Gear)					
Length	159.4 in	4,049 mm			
Width	56.1 in	1,424 mm			
Height	93.9 in	2,385 mm			
Weight (Shipping)	7,588 lb	3,442 kg			
Weight (Ready to Run)	10,547 lb	4,784 kg			
Sound Level @ 23ft (7m), 100% Load	70 dB(A)				







Doosan Infracore Portable Power 1293 Glenway Drive Statesville, NC 28625

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(800) 633-5206 DoosanPortablePower.com

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