

G290 PowerSource Generators

Voltage	P.F.	Armature Connection	Rating	Amps	kW	kVA
480 / 277 V - 3Ø	0.8	Series Wye	Prime	349	232	290
			Standby	384	255	319
240 / 139 V - 3Ø	0.8	Parallel Wye	Prime	698	232	290
			Standby	768	255	319
208 / 120 V - 3Ø	0.8	Parallel Wye	Prime	805	232	290
			Standby	886	255	319
240 / 120 V - 1Ø	1.0	Parallel Zig-Zag	Prime	821	197	197
			Standby	903	217	217

Features

Generator Set

- Heavy duty generator system designed for prime power operation in rental, construction and special events applications.
- Generator system features a heavy-duty, drag-able skid base, and can be easily equipped with an integrated running gear system for mobile applications.
- Generator is CSA certified for electrical equipment per C22.2, No. 14.

Engine

- Industrial, heavy-duty diesel engine is EPA emissions certified to current model year requirements.
- Electronically controlled engine provides isochronous frequency control and advanced diagnostic monitoring and protection.
- Oversized cooling system rated for high ambient operation.
- All filters and maintenance points are easily accessed enhancing serviceability.

Generator

- AREP brushless excitation provides powerful motor starting kVA and is isolated from harmonic-induced waveform distortion.
- Class H insulation for ultimate resistance to high temperature and humidity.
- Capable of supporting up to 300% overload for up to 10 seconds.
- R438 voltage regulator provides superior voltage stability and transient recovery.
- Single, sealed-for-life bearing ensures long maintenance-free performance.
- Alternator features buss bar reconnection capabilities to easily configure the unit for operation at most common voltages.



Control System

- Operator-preferred analog gauges provide at-a-glance monitoring of vital engine and generator parameters (digital control system optional).
- 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.
- PowerSource features remote Auto Start / Stop capability via industry standard two wire, closed contact logic, allowing for connection to automatic transfer switchgear and other remote starting devices.

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 a five lug (L1 L2 L3 N PE) terminal board and accept bare end or terminated cables.

Fuel System and Environmental Containment

- Single wall steel fuel tank is mounted within the skid base, providing double wall protection and 110% environmental containment of all fluids.

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- The fuel filler is lockable and is located within the containment basin, minimizing possible spillage.
- Standard fuel / water separator and fine micron fuel filter keep contaminants out of the system and increase reliability.

Enclosure

- The heavy duty enclosure provides weather protection of components and provides sound attenuation for use in noise sensitive areas.
- 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.
- The engine generator assembly is mounted on fail-safe vibration isolators.
- Wide opening side access doors are hinged, providing easy access and are equipped with recessed, pad-lockable handles.
- PowerSource units are equipped with a center-point lifting eye for safe, well-balanced hoisting.

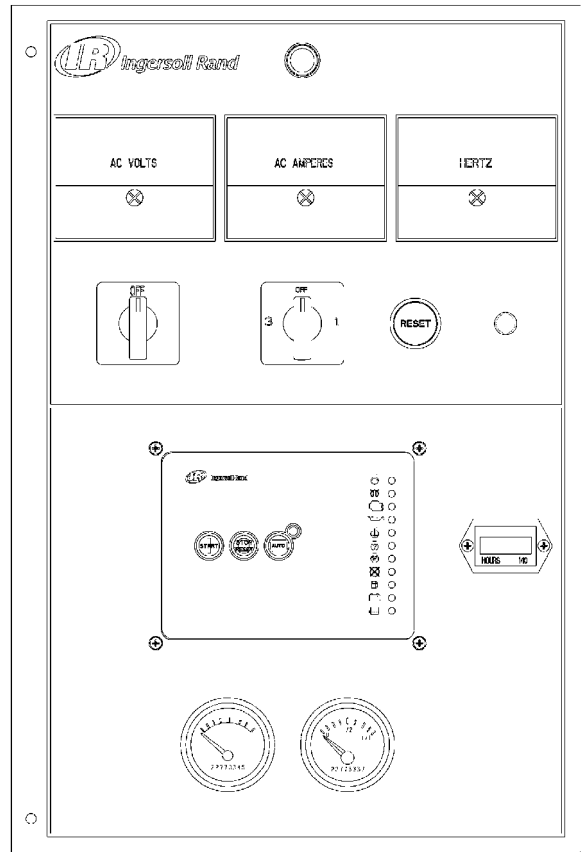
Warranty

- PowerSource is covered by a comprehensive limited warranty:
 - Package: 1 year / 2000 hours
 - Engine: 1 year / unlimited hours or 2 years / 2000 hours
 - Alternator: 2 years / 4000 hours
- Extended warranty options are available.

Power Connections	
Terminal Board Maximum Load Cable Size (Bare Wire Cable)	1000 MCM
Terminal Board Maximum Load Cable Size (Lugged Cable)	500MCM—1000MCM

Reference Conditions		
Maximum Ambient Temperature	104 °F	40 °C
Maximum Relative Humidity	100%	
Maximum Altitude	see d-rating chart	
Minimum Starting Temperature (Standard)	10 °F	-12 °C
Minimum Starting Temperature (w/ Cold Start Option)	-10 °F	-23 °C

* For operation outside of these reference conditions, contact factory for de-rating instructions



Control Panel Features

- AC Voltmeter with phase selector switch
 - Range: 0—600 V, 2% Accuracy
- AC Ammeter with phase selector switch
 - Range: 0—1000 A, 2% Accuracy
- AC Frequency meter
 - Range: 45—65 Hz, 3% Accuracy
- DC Voltmeter
 - Range: 18—32 V
- Fuel tank level gauge
 - Range: 0—1/2—1/1
- Runtime hour meter
 - Range: 0—99999.9 h
- Fine voltage adjustment control (+/- 5%)
- Overcurrent relay reset
- Control panel lamp

Engine Control Module with Auto Start / Stop

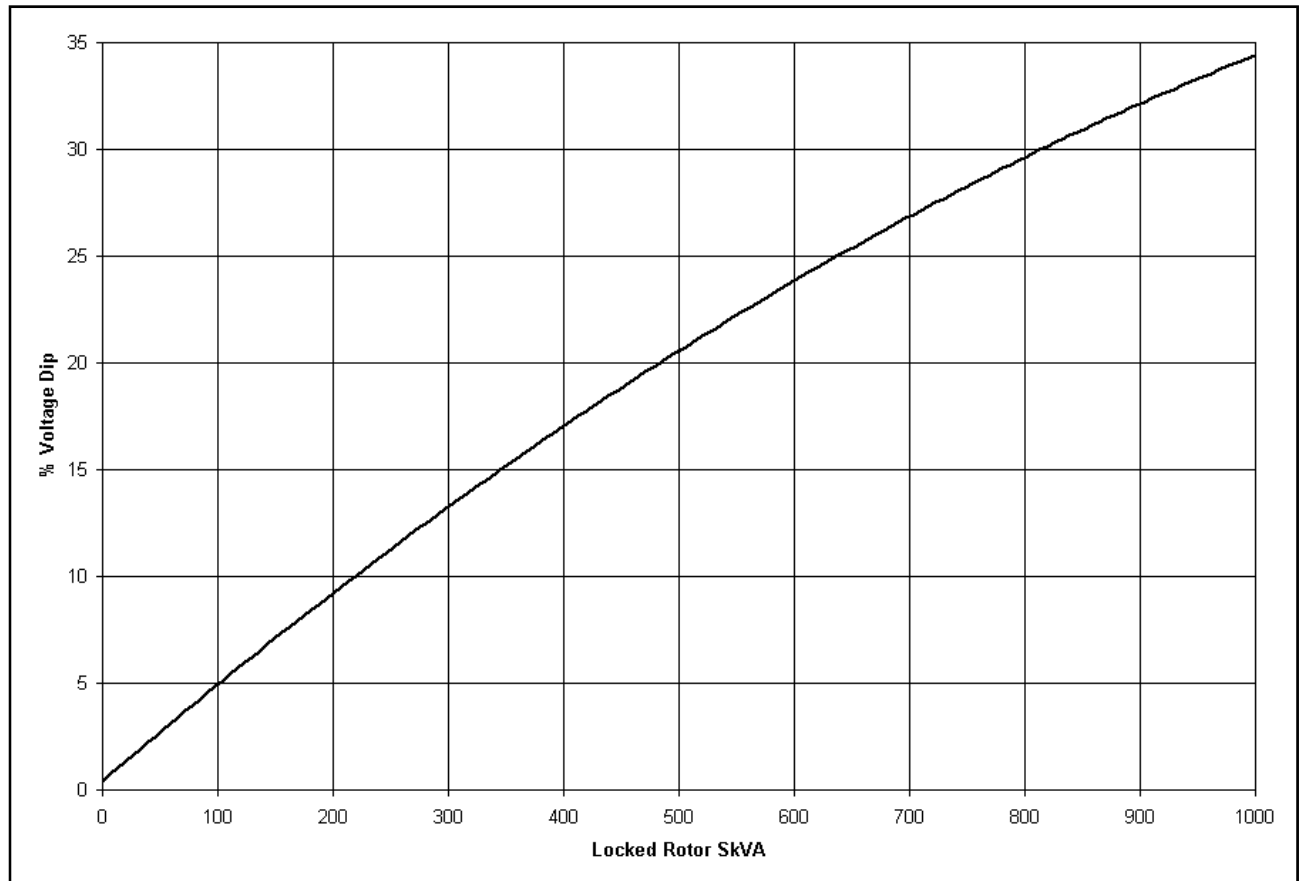
- **Status Indications (Green)**
 - System On Preheat Cycle On
 - Engine COM OK AutoStart Mode Active
- **Shutdown Indications (Red)**
 - Low Oil Pressure High Coolant Temperature
 - Engine Fault Overspeed
 - Overcrank Low Fuel Level
- **Warning Indications (Red)**
 - Low Battery Alarm High Containment Alarm

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Engine Data		
Engine Manufacturer	Cummins	
Model Number	QSL9-G3	
Prime Output @ Rated Speed	352 hp	262 kW
Standby Output @ Rated Speed	399 hp	297 kW
Engine Type	Inline Four Cycle	
Engine Control	ECU	
Emissions Certification	EPA Tier III Non-road	
Number of Cylinders	6	
Aspiration	Turbocharged with charge air intercooling	
Bore × Stroke	4.5 × 5.7 in	114 × 145 mm
Displacement	537 in ³	8.8 L
Compression Ratio	16.8 : 1	
Governor Type	Electronic	
Speed Regulation Accuracy (Steady State)	+ / - 0.25%	
Single Step Load Acceptance	100%	
Cooling System	Water / Glycol	
Charging Alternator Output	A	
DC System Voltage	24 V	
Battery Output	2 × 1000 CCA	
Oil Sump Capacity	7 gal	27 L
Cooling System Capacity	8.9 gal	33.7 L
Fuel Cell Capacity (Usable Capacity - Level Operation)	386 gal	1461 L

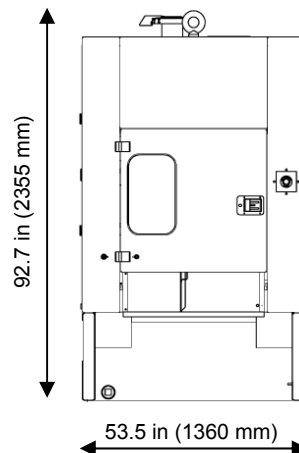
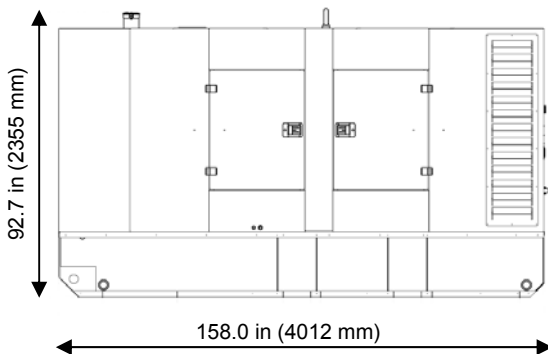
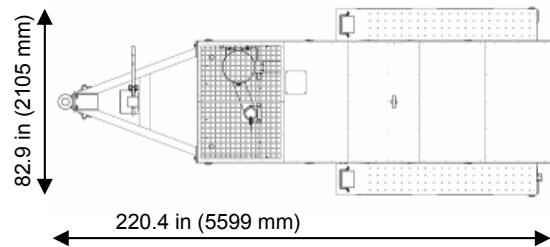
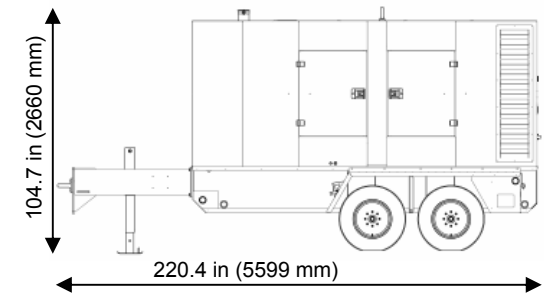
Fuel Consumption at Prime Power Rating	gal / h	L / h	Runtime
@ 25% Load	5.59	21.2	69.1
@ 50% Load	10.83	41	35.6
@ 75% Load	15.21	57.6	25.4
@ 100% Load	18.49	70	20.9

Alternator Data	
Alternator Manufacturer	Leroy Somer
Alternator Model	LSA 462 L9
Alternator Type	Four Pole, Revolving Field
Number of Leads	12
Insulation Class	H
Frequency	60 Hz
Available Voltages - Three Phase	208 / 220 / 230 / 240 / 416 / 440 / 460 / 480 V
Available Voltages - Single Phase	120 / 127 / 133 / 139 / 240 / 254 / 266 / 277 V
Voltage Connection Method	Buss Bar Reconnectable
Excitation Method	AREP
Voltage Regulation Accuracy (Steady State)	+/-0.5%
Total Harmonic Distortion (THD) @ No Load	< 2.5%
Telephone Influence Factor (TIF)	< 50



PowerSource G290

Running Gear		
Configuration	tandem axle	
Suspension	torsion bar	
Standard Brake System Configuration	electric	
Tires	9.50-16.5LT/E	
Wheels	16.5 × 6.75 in (419 × 171 mm), 8 lug on 6.5 in (165 mm) bolt circle	
Lighting and Reflectors	meets 49CFR571 requirements	
Electrical Connection to Towing Vehicle	six pole round plug	
Standard Coupling Connection	3 in (76 mm) lunette eye	
Hitch Height	22 - 35.5 in × 4.5 in	559 - 902 mm × 113.4 mm
Safety Chains	2 × 3/8 in (10 mm) chains with slip hooks and safety latches	
Jack Stand Configuration	10000 lb (4536 kg) capacity, top wind with drop foot and sand shoe, fixed mount	
Weights & Dimensions (w/ Running Gear)		
Length	220.9 in	5,612 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	5,423 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	3,441 kg
Weight (Ready to Run)	10,547 lb	4,783 kg
Sound Level @ 23ft (7m), 100% Load	70 dB(A)	



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