

G450 PowerSource Generators

Voltage	P.F.	Armature Connection	Rating	Amps	kW	kVA
480 / 277 V - 3Ø	0.8	Series Wye	Prime	548	365	456
			Standby	603	401	502
240 / 139 V - 3Ø	0.8	Parallel Wye	Prime	1097	365	456
			Standby	1207	401	502
208 / 120 V - 3Ø	0.8	Parallel Wye	Prime	1260	363	454
			Standby	1386	400	499

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.

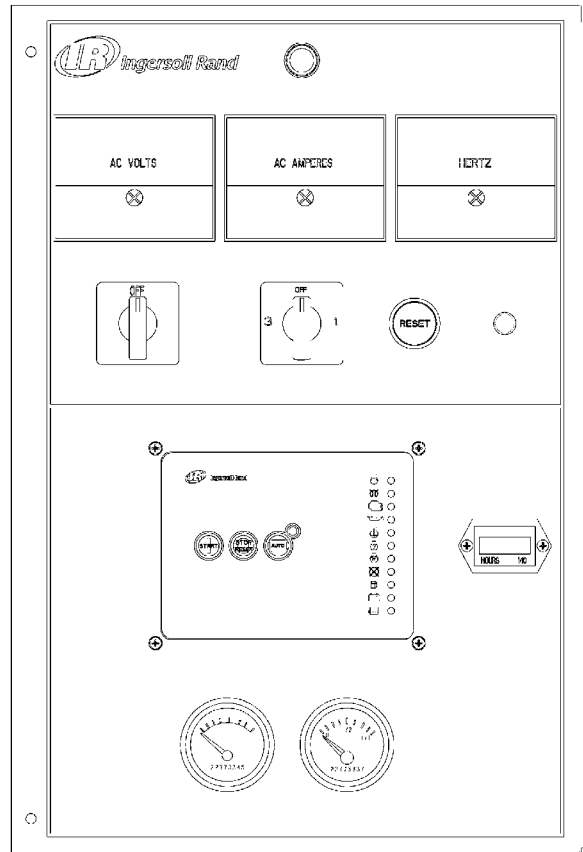
Warranty

- 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 × 2
Terminal Board Maximum Load Cable Size (Lugged Cable)	500MCM—1000MCM × 2

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—1500 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

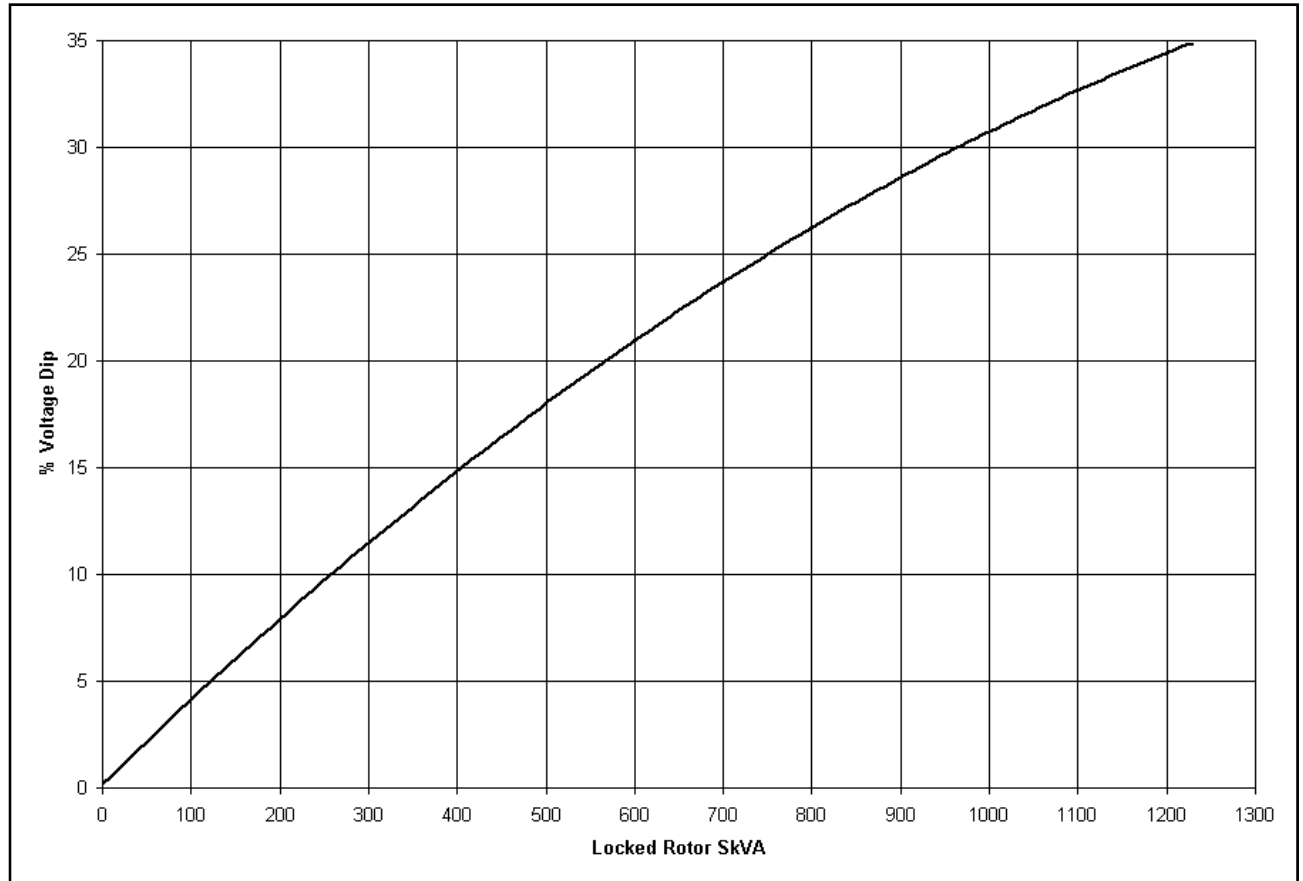
- **Status Indications (Green)**
 - System On
 - Engine COM OK
 - Preheat Cycle On
 - AutoStart Mode Active
- **Shutdown Indications (Red)**
 - Low Oil Pressure
 - Engine Fault
 - Overcrank
 - High Coolant Temperature
 - Overspeed
 - Low Fuel Level
- **Warning Indications (Red)**
 - Low Battery Alarm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

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Engine Data		
Engine Manufacturer	Cummins	
Model Number	QSX15-G9	
Prime Output @ Rated Speed	555 hp	414 kW
Standby Output @ Rated Speed	616 hp	460 kW
Engine Type	Inline Four Cycle	
Engine Control	ECU	
Emissions Certification	EPA Tier II Non-road	
Number of Cylinders	6	
Aspiration	Turbocharged with charge air intercooling	
Bore × Stroke	5.4 × 6.6 in	137 × 169 mm
Displacement	909 in ³	14.9 L
Compression Ratio	17 : 1	
Governor Type	Electronic Isochronous	
Speed Regulation Accuracy (Steady State)	+ / - 0.25%	
Single Step Load Acceptance	100%	
Cooling System	Water / Glycol	
Charging Alternator Output	35 A	
DC System Voltage	24 V	
Battery Output	2 × 1300 CCA	
Oil Sump Capacity	24 gal	91 L
Cooling System Capacity	16.25 gal	61.5 L
Fuel Cell Capacity (Usable Capacity - Level Operation)	574 gal	2173 L

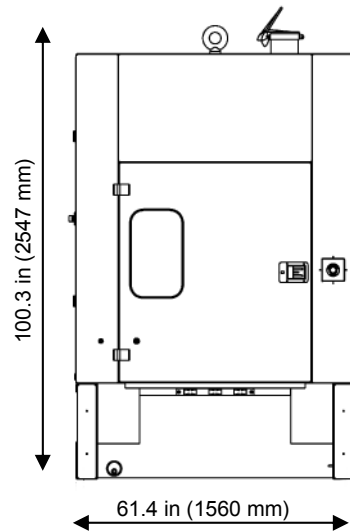
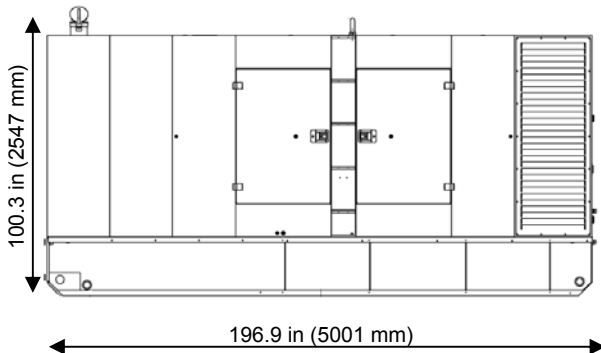
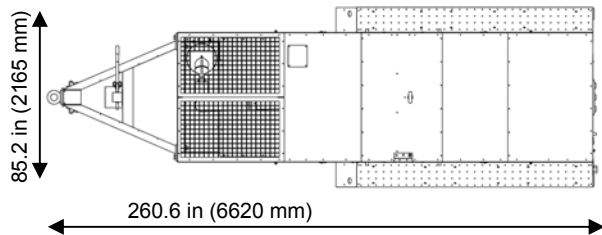
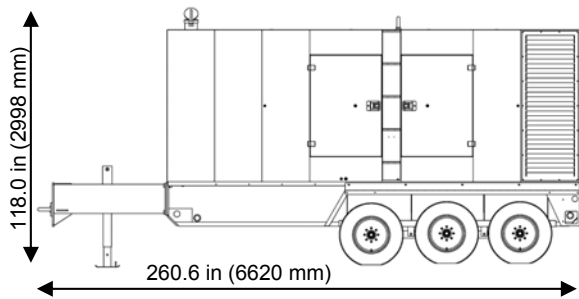
Fuel Consumption at Prime Power Rating	gal / h	L / h	Runtime
@ 25% Load	8.21	31.1	69.9
@ 50% Load	14.66	55.5	39.2
@ 75% Load	20.28	76.8	28.3
@ 100% Load	25.8	97.7	22.2

Alternator Data	
Alternator Manufacturer	Leroy Somer
Alternator Model	LSA 472 VS2
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%
Telephone Influence Factor (TIF)	< 50



PowerSource G450

Running Gear	
Configuration	triple axle
Suspension	leaf spring
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	21.5 - 35 in × 4.5 in 546 - 889 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	260.9 in 6,626 mm
Width	85.9 in 2,181 mm
Height	119.8 in 3,042 mm
Weight (Shipping)	13,868 lb 6,289 kg
Weight (Ready to Run)	18,271 lb 8,286 kg
Weights & Dimensions (Less Running Gear)	
Length	198.3 in 5,038 mm
Width	63.9 in 1,624 mm
Height	100.3 in 2,547 mm
Weight (Shipping)	12,095 lb 5,485 kg
Weight (Ready to Run)	16,498 lb 7,482 kg
Sound Level @ 23ft (7m), 100% Load	74 dB(A)



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