



Key Features

- Designed and manufactured in an ISO9001-certified facility in Statesville, North Carolina, USA.
- Heavy duty mobile generator system designed for prime power operation in rental, industrial and oil & gas applications.
- Generator is CSA certified for electrical equipment per C22.2, No. 14.

Voltage Configuration *	Frequency (Hz)	Power Factor	Fuel Type **	Prime Power Rating		
				kVA	kW	Current (A)
600/346V - 3Ø WYE	60	0.8	Natural Gas CH ₄	N/A	N/A	N/A
480/277V - 3Ø WYE	60	0.8		224	179	269
400/230V - 3Ø WYE	50	0.8		200	160	289
600/346V - 3Ø WYE	60	0.8	Propane C ₃ H ₈	N/A	N/A	N/A
480/277V - 3Ø WYE	60	0.8		145	116	175
400/230V - 3Ø WYE	50	0.8		135	108	195

- * Note: Not all listed voltages are available on standard product. Some voltages may require selection of optional features.
- ** Listed ratings are for municipal-supplied fuels. Operation on non-standard fuel, such as well-head gas, requires a chemical analysis of the fuel composition to determine the prime power capability which may be a de-rate compared to the nominal rating.

Skidbase and Enclosure

- Package foundation is a heavy duty, oilfield-ready skidbase equipped with four-point tie downs.
- The skidbase is a fully bonded, Environmental Containment design, sized to contain at least 110% of total oil and fuel volume, to prevent any leakage of hazardous fluids from the package.
- Ducted air intakes ensure minimal water ingress into the containment area, even during operation in the heaviest rain conditions.
- The enclosure is constructed from corrosion-resistant galvanealed steel and coated with a 13 stage powder paint process for long life even in harsh environments.
- The enclosure panels are fitted with sound-absorbing acoustical material to help reduce noise for quiet operation in noise sensitive applications such as concerts, events and nighttime construction.
- Wide opening access doors are side hinged, providing easy access to service and maintenance points and are equipped with recessed, pad-lockable handles and safety latches to hold doors open during servicing.
- 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.

Diesel Engine

- Heavy-duty Cummins diesel engine is emissions certified to EPA Tier 2 TPEM standards and provides the optimum mix of performance and fuel economy.
- Electronically controlled engine provides isochronous frequency control and advanced diagnostic monitoring and protection.
- 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.

CoolBox Cooling System

- Doosan's CoolBox cooling system brings cool air into the enclosure through ducted inlet panels to ensure low noise levels.
- Cooling air flows through the package by an engine-driven pusher fan which moves airflow from the inlet panels, across the powertrain and through the heat exchangers before being exhausted through the roof outlets in the discharge plenum.
- The CoolBox solution balances performance in high-ambient conditions, low noise levels and minimum water ingress with a cost effective package design.
- Doosan generators provide performance at the full prime power rating at ambient temperatures up to 104°F (40°C) without derating.

Alternator

- Leroy Somer alternators feature AREP brushless excitation providing industry leading motor starting kVA and 300% overload capability.
- R450M automatic voltage regulator provides precision control of voltage level and fast response to load changes.
- Class H insulation with upgraded environmental coating for ultimate resistance to high temperature and humidity.
- Alternator-mounted link board allows for easy configuration of the unit to operate at most common voltages.

Control System

- A complete array of operator-preferred analog gauges provide at-a-glance monitoring of vital engine and generator parameters.
- 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.
- Standard Run / Idle selector switch allows operators to start and warm up the generator at low engine speed to prevent excess engine wear when operating in cold climates.
- Engine Diagnostic Trouble Codes (DTCs) are displayed on the LCD screen, 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 at 75% load 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 primary fuel / water separator and fine micron secondary fuel filter keep contaminants out of the system and increase reliability.
- The containment system features a three-inch drain plug for easy cleaning, and the fuel tank is equipped with a drain plug mounted behind the containment plug for easy cleaning.
- Leak-proof fuel vents eliminate the potential for fuel purge during out-of-level conditions during transport and load / un-load.
- Low fuel shutdown ensures the engine will not lose prime if it runs 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.
- Tri-axle with leaf spring suspension with E-Z-Lube hub assemblies and standard 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 7-pole "RV"-style plug with a high quality, jacketed wiring harness.
- All units are equipped with a 3-inch pintle eye, heavy duty safety chains and a high quality, heavy-duty jack stand.

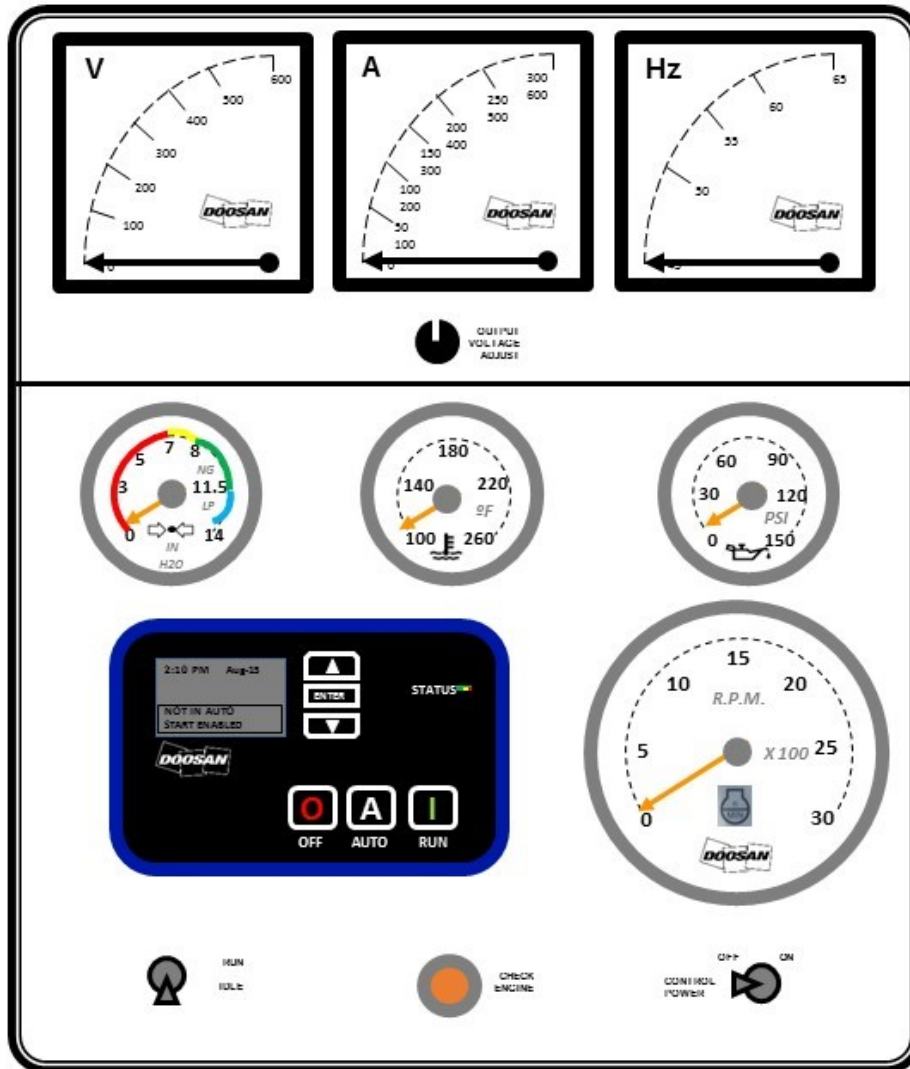
Options

- Doosan models can be equipped with a broad array of optional equipment to meet the need of specific applications. Common selections include:
 - Cold start options including engine coolant heater, battery pad warmers, and heated crankcase breather systems
 - Three-way fuel valve for connection to a remote fuel tank
 - Battery charger
 - Automatic oil level maintainer

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

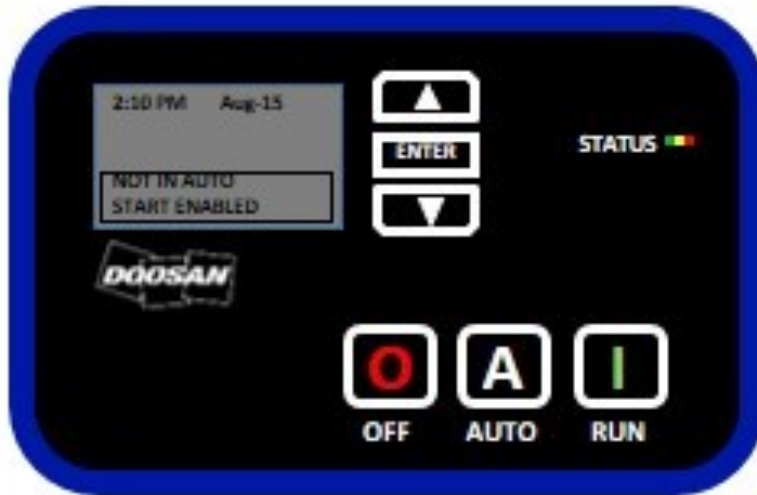
Operator Panel



Operator Panel Features

1. Tachometer: 0-3000 RPM scale
2. Oil Pressure: 0-150 PSI scale
3. Coolant Temperature: 100°-260°F scale
4. Gaseous Fuel Pressure: 0-14 inches of water scale
5. Control Power On / Off Switch
6. Run / Idle Control Switch
7. Check Engine Lamp (CEL)
8. Voltage Adjustment Control
9. TG410 Controller
10. Frequency-meter: 45-65 Hz scale
11. AC Ammeter: Dual scale: 0-300A @ 480V / 0-600A @ 208V
12. AC Voltmeter: 0-600 V scale

TG410 Automatic Start Stop Controller



TG410 Genset Controller Features

Functionality

- Automatic shutdowns and warnings
- Manual and remote autostart
- Engine speed adjustment
- Aftertreatment conditioning controls and status icons
Auto / Force / Inhibit
- SAE J1939 electronic engine communication
- Engine Fault Code Annunciation
SPN / FMI / OC
- 150 Event Fault Log
- Isolated RS 485 Modbus communication capable
- NFPA 110 Level 1 capable
- Maintenance counter
- Autostart on low battery capable
- Exerciser clock
- Automatic, inverse time delay overcurrent protection

Form Factor

- 6-Button control
- 6-Line LCD Display with user adjustable contrast and temperature compensation from -4°F (-20°C) to 158°F (70°C)
- 1 Multicolor (Red/Yellow/Green) Status LED
- Front Gasket Seal for water ingress prevention to IP65 protection
- Conformal coated circuit board for protection against moisture and contaminants
- Rugged polycarbonate enclosure designed to survive extreme applications and abuse
- Controller functions in ambient conditions ranging from -40°F/C to 158°F (70°C)
- Meets or exceeds SAE J1113-11 with respect to electrical transients
- Meets or exceeds SAE J1455 with respect to vibration, thermal shock and cycling
- Meets or exceeds MIL-STD-461E with respect to electromagnetic compatibility
- Maximum 600V AC, true RMS sensing, +/- 1% full scale accuracy
- Current sensing, +/- 2% full scale accuracy

<p>MANUAL RUN . . .</p> <p>Genset Current</p> <p>A: 100 A</p> <p>B: 100 A</p> <p>C: 100 A</p>	<p>MANUAL RUN . . .</p> <p>Genset Voltage</p> <p>A-B: 480.0V</p> <p>B-C: 480.0V</p> <p>C-A: 480.0V</p>
<p>MANUAL RUN . . .</p> <p>Oil Pressure 75.0 PSI</p> <p>Fuel Level 95.3%</p>	<p>MANUAL RUN . . .</p> <p>Engine Temp 180.5 F</p> <p>DEF Fluid Level 90.5%</p>
<p>MANUAL RUN . . .</p> <p>Engine Speed 1800.0RPM</p> <p>Hold AUTO+ ▼ / ▲</p> <p>To Adjust RPM</p>	<p>MANUAL RUN . . .</p> <p>Regen Status Auto</p> <p>Hold ENTER for 3s to change</p>
<p>MANUAL RUN . . .</p> <p>Battery Voltage 13.6 V</p> <p>AC Frequency 60.0 Hz</p>	<p>MANUAL RUN . . .</p> <p>Running Time 8.3 Hours</p> <p>Engine Hours 250.7 Hours</p>

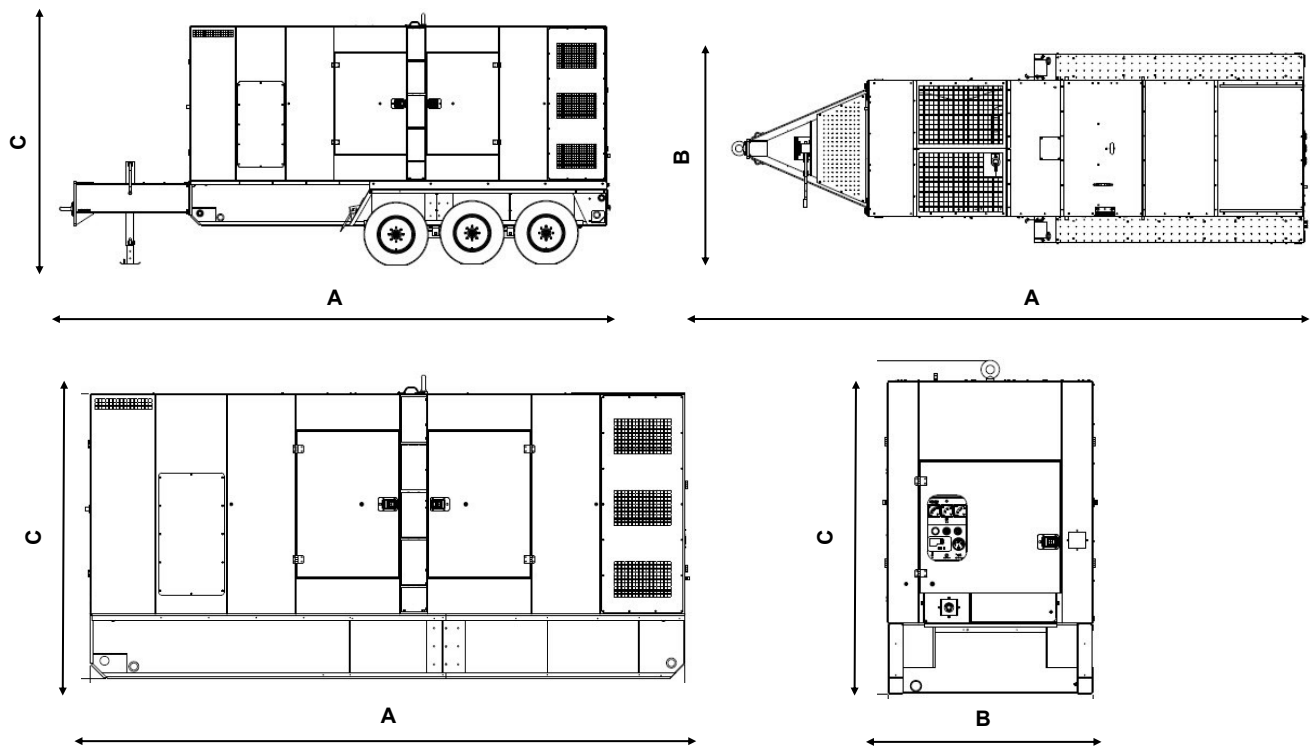
Engine Data				
Engine Manufacturer	Power Solutions International (PSI)			
Model Number	11.1L			
Engine Power @ Rated Speed	Natural Gas CH ₄		Propane C ₃ H ₈	
Prime Output @ 1800 RPM	268 bhp	200 kWm	177 bhp	132 kWm
Standby Output @ 1800 RPM	315 bhp	235 kWm	208 bhp	155 kWm
Prime Output @ 1500 RPM	241 bhp	180 kWm	162 bhp	120 kWm
Standby Output @ 1500 RPM	268 bhp	200 kWm	180 bhp	134 kWm
Engine Type	Four Cycle, Inline			
Engine Control	ECU			
Emissions Certification	EPA-Compliant			
Number of Cylinders	6			
Aspiration	Turbocharged / Intercooled			
Aftertreatment Technology	3-Way Catalyst			
Bore × Stroke	4.84 x 6.1 in		123 x 155 mm	
Displacement	673 in ³		11.1 L	
Compression Ratio	10.5:1			
Governor Type	Isochronous			
Speed Regulation Accuracy	+ / - 0.25% Steady State			
Single Step Load Acceptance	100%			
Cooling System	50% Glycol / 50% Water			
Charging Alternator Output	45A			
DC System Voltage	24 V			
Battery Size / Output	2 × 8D / 1300CCA			
Fluid Capacities			Gal	L
Engine Crankcase Lubricant Capacity			6.6	25
Cooling System Capacity			23	105
60Hz Fuel Consumption	Natural Gas CH ₄		Propane C ₃ H ₈	
	ft ³ / h	kg / h	ft ³ / h	kg / h
@ 25% Load				
@ 50% Load				
@ 75% Load				
@ 100% Load	2115	48	704	38
Reference Conditions				
Rated Ambient Temperature	-20°F—104°F		-29°C—40°C	
Minimum Starting Temperature (Standard)	0°F		-18°C	
Minimum Starting Temperature (w/ Cold Start Opt)	-20°F		-29°C	
Maximum Altitude				

Alternator Data		
Alternator Manufacturer	Leroy Somer	
Alternator Model	LSA 46.2 M5 C6	
Alternator Type	Four Pole Revolving Field	
Number of Leads	12	
Insulation Class	H	
Winding Pitch	2/3	
Voltage Connection Method	N/A	
Excitation Method	Brushless w/ AREP	
Voltage Regulator Model	R450	
Voltage Regulation Accuracy	+/-0.5%	
Maximum Unbalance Load	25%	
Total Harmonic Distortion (THD)	<2.5% @ 0% Load	
Telephone Influence Factor (TIF)	<50	
Motor Starting Capability	480V	600V
SKVA @ 20% Voltage Dip	325	N/A
SKVA @ 25% Voltage Dip	425	N/A
SKVA @ 30% Voltage Dip	550	N/A
SKVA @ 35% Voltage Dip	700	N/A

Power Connections	Natural Gas CH ₄	Propane C ₃ H ₈
Main Circuit Breaker Thermal Trip Rating	300 A	
Overcurrent Trip Setpoint (240V-1Ø)	N/A	N/A
Overcurrent Trip Setpoint (208V-3Ø & 240V-3Ø)	N/A	N/A
Overcurrent Trip Setpoint (240V-3Ø Delta)	N/A	N/A
Overcurrent Trip Setpoint (480V-3Ø)	299 A	194 A
Overcurrent Trip Setpoint (600V-3Ø)	N/A	N/A
20A—125V GFCI Duplex (NEMA 5-20R) Receptacles	N/A	
50A—125/250V Temp Power (CS6369) Receptacles	N/A	
400A-600V Camlock Connectors (Optional)	N/A	
Terminal Board Maximum Cable Size (Bare Wire)	AWG 6—350MCM	
Terminal Board Maximum Cable Lug Size	1/2 in (12.7 mm)	

Running Gear	To 49CFR571 requirements	
Gross Vehicle Weight Rating (GVWR)	12766 lb	5791 kg
Gross Axle Weight Rating (GAWR)	19020 lb	8627 kg
Configuration	Tri-Axle	
Suspension	Leaf Spring	
Standard Brake System Configuration	Electric	
Optional Brake System Configuration	N/A	
Tires	ST235/80R16, Radial	
Wheels	16" x 6", 8 lug on 6.5" bolt circle	
Track Width	75.3 in	1913 mm
Lighting and Reflectors	Meets Federal/Canada Motor Vehicle Safety Standard 571.108	
Electrical Connection to Towing Vehicle	7-Pole Round "RV" Blade Connector	
Standard Trailer Coupling	3" (78 mm) Pintle Eye	
Optional Trailer Coupling	N/A	
Hitch Height	4-Position Adjustment 22 in—35.5 in	
Safety Chains	2 x 3/8" with slip hooks and safety latches	
Jack Stand Configuration	Fixed Mount, 10000 lb Capacity	

Package Data	With Running Gear		Skidmount	
Length (A)	259.4 in	6588 mm	196.9 in	5001 mm
Width (B)	85.2 in	2165 mm	61.4 in	1560 mm
Height (C)	118 in	2998 mm	100.3 in	2547 mm
Weight (Shipping)	11845 lb	5384 kg	lb	kg
Weight (Ready to Run)	11845 lb	5384 kg	lb	kg
Sound Level @ 23ft (7m), 100% Load	dB(A)			



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