

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, construction and special events applications.
- Generator is CSA certified for electrical equipment per C22.2, No. 14.
- Meets Transport Canada CGSB-43.146/UN31A and Portable Oil Burning - B138 CAN/ULC-S601-14 fuel system requirements.

Voltage Configuration	Frequency (Hz)	Power Factor	Prime Power Rating		
			kVA	kW	Current (A)
600/377V - 3Ø WYE	60	0.8	570	456	548
480/277V - 3Ø WYE	60	0.8	570	456	686
240/139V - 3Ø WYE	60	0.8	570	456	1371
208/120V - 3Ø WYE	60	0.8	570	456	1582
240/120V - 1Ø ZIG ZAG*	60	1.0	205	205	854

* Note: Requires Single Phase Linkboard Option

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 fluid volume, to prevent any leakage of hazardous fluids from the package.
- Ducted air intakes ensure near-zero water ingress into the containment area, even during operation in the heaviest rain conditions.
- The enclosure is constructed from corrosion-resistant galvanized steel and coated with a multi-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 provides 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 (EPA Tier 4-final) provides the optimum mix of performance and fuel economy.
- No Minimum Load Requirements -13°F (-20°C) - Integrated aftertreatment thermal management system.
- Selective Catalyst Reduction (SCR) aftertreatment system meet the stringent NOx and particulate limits required by the EPA Tier 4-final emissions standards.
- 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 engine driven fan is equipped with a clutch to allow the fan to operate at variable speeds to optimize cooling system performance and maintain internal enclosure temperature at a broad range of ambient temperatures and load conditions.
- The CoolBox+ solution maximizes performance to achieve the lowest noise levels and minimum water ingress within a compact footprint.
- 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 brushless excitation providing industry leading motor starting kVA and 300% overload capability.
- Oversized Alternator: Fully rated 208V @ Class F temperature rise.
- D510C digital 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.
- The unit is configured for operation at most common voltages via a multi-position link board, easily accessible from the control panel and equipped with a safety interlock to prevent access while energized.

Control System

- Paralleling for up to 32 gensets included as standard feature.
- 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 TDU 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 TDU 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.
- Pad-lockable 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.
- Optional camlock panel includes five panel-mounted sets of (5) 400A female connectors to further expand connection capabilities.

Fuel and DEF System

- Single fuel tank sized for 21-hour runtime at full 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.
- 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 engine will not lose prime if it runs out of fuel.
- Diesel Exhaust Fluid (DEF) tank sized for a minimum of 24-hour runtime.

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 slipper leaf spring suspension with E-Z-Lube hub assemblies and electric brakes.
- All models feature high quality, grommet-mount LED lighting and meet Federal Motor Vehicle Safety Standards for lighting and conspicuity.
- Trailer-to-vehicle connector is a 7-pole round pin SAE J560 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 Weather Package including engine coolant heater, heated crankcase breather, and battery charger.
 - Three-way fuel valve for connection to a remote fuel tank and external DEF fill port with transfer pump control logic for connection to an external DEF supply tank.
 - Running gear options including rear stabilizer jacks, drawbar-mounted lockable tool box, trailer breakaway battery, 2-5/16" ball coupler, and spare tire.
 - Dynagen control panel, 5 sets of (5) camlocks on either DEIF or Dynagen control panels
 - Wheel chocks, engine oil maintainer, audible/visual shutdown alarm, tinted window, Lojack, and single-phase linkboard

Warranty

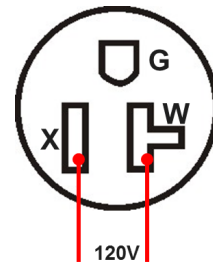
- All models are covered by a comprehensive limited warranty:
 - Package: 1 year / 3000 hours
 - Cummins engine: 1 year / unlimited hours or 2 years / 2000 hours
 - Leroy Somer alternator: 2 years / 4000 hours

Engine Data		
Engine Manufacturer	Cummins	
Model Number	X15	
Prime Output @ 1800 RPM	680 bhp	507 kWm
Standby Output @ 1800 RPM	755 bhp	563 kWm
Engine Type	Four Cycle, Inline	
Engine Control	ECU	
Emissions Certification	EPA Tier 4 Final	
Number of Cylinders	6	
Aspiration	Turbocharged / Intercooled	
Aftertreatment Technology	Selective Catalyst Reduction (SCR)	
Bore × Stroke	5.39 x 6.65 in	137 x 169 mm
Displacement	912 in ³	14.95 L
Compression Ratio	17.2:1	
Governor Type	Isochronous	
Speed Regulation Accuracy	+ / - 0.25% Steady State	
Single Step Load Acceptance	100%	
Cooling System	50% Glycol / 50% Water	
Charging Alternator Output	110 A	
DC System Voltage	24 V	
Battery Size / Output	2 × 8D / 1300 CCA	

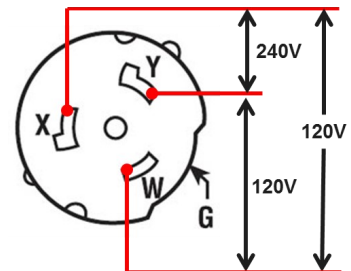
Fluid Capacities		Gal	L
Engine Crankcase Lubricant Capacity		24	90.9
Cooling System Capacity		8.7	32.9
Usable Fuel Cell Capacity		656	2483.2
Usable DEF Tank Capacity		46.4	174
60Hz Fuel Consumption	Gal / h	L / h	Runtime Hrs
@ 25% Load	9.1	34.4	72.1
@ 50% Load	16.8	63.6	39.0
@ 75% Load	23.6	89.3	27.8
@ 100% Load	31.1	117.7	21.1
Reference Conditions			
Rated Ambient Temperature		-20°F—110°F	-29°C—43°C
Minimum Starting Temperature (Standard)		0°F	-18°C
Minimum Starting Temperature (w/ Cold Start Opt)		-20°F	-29°C

Alternator Data	
Alternator Manufacturer	Leroy Somer
Alternator Model	LSA 47.2 L9
Alternator Type	Four Pole Revolving Field
Number of Leads	12
Insulation Class	H
Winding Pitch	2/3
Voltage Connection Method	Two-Position Link Board: Series Wye / Parallel Wye
Excitation Method	Brushless w/ AREP
Voltage Regulator Model	D510C
Voltage Regulation Accuracy	+/-0.25%
Maximum Unbalance Load	25%
Total Harmonic Distortion (THD)	<1.5% @ 0% Load
Telephone Influence Factor (TIF)	<50

Power Connections	
Main Circuit Breaker Rating	2000 A
Overcurrent Trip Setpoint (240V-1Ø)	863 A
Overcurrent Trip Setpoint (208V-3Ø & 240V-3Ø)	1773 A
Overcurrent Trip Setpoint (480V-3Ø)	774 A
Overcurrent Trip Setpoint (600V-3Ø)	618 A
20A—125V GFCI Duplex (NEMA 5-20R) Receptacles	2
50A—125/250V Temp Power (CS6369) Receptacles	3
400A-600V Camlock Connectors (Optional)	5 Sets
Terminal Board Maximum Cable Size (Bare Wire)	4 × AWG 2—600MCM
Terminal Board Maximum Cable Lug Size	1/2 in (12.7 mm)



NEMA 5-20R Receptacle



CS6369 Receptacle



Operator Panel Features

1. Control Power On / Off Switch
2. Alarm Silence Button (optional)
3. Run / Idle Control Switch
4. Deif TDU-107 Control Display
5. Frequency-meter: 45-65 Hz scale
6. AC Ammeter: Dual scale: 0-2000A@ 480V / 0-1400A@ 208V
7. AC Voltmeter: 0-600 V scale
8. Quick Connect—USB Controls Interface

Deif AGC4 Automatic Genset Controls

- Operating Temperature: -13°F to 158°F (-25°C to 70°C)
- Storage Temperature: -40°F to 158°F (-40°C to 70°C)
- Single Diesel Generator or Power Management via Paralleling Gensets (Up to 32)
- Operation Modes: Island, Automatic Mains Failure, Fixed Power, Peak Shaving, Load Take Over
- Automatic shutdowns and warnings
- Manual and remote AutoStart
- Aftertreatment conditioning controls and status Icons
Auto / Force / Inhibit
- SAE J1939 electronic engine communication
- Engine Fault Code Annunciation
SPN / FMI / OC
- MODBUS or CANBUS with redundancy

Deif TDU 107 Display

- Operating Temperature: -4°F to 140°F (-20°C to 60°C)
- Storage Temperature: -22°F to 158°F (-30°C to 70°C)
- 7" TFT, Capacitive Touch Display with Configurable Menus
- Environmental Protection: IP66 (front) and IP20 (rear)
- Meets or exceeds IEC 60068-1-6, IACS UR E10, IEC 60068-2-27 with respect to vibration, thermal shock and cycling

Running Gear	To 49CFR571 requirements	
Gross Vehicle Weight Rating (GVWR)	24,444 lb	11,110 kg
Gross Axle Weight Rating (GAWR)	22,380 lb	10,172 kg
Configuration	Tri-Axle	
Suspension	Slipper Leaf Spring	
Standard Brake System Configuration	Electric	
Tires	ST235/85R16 F PLY	
Wheels	16" x 6", 8 lug on 6.5" bolt circle	
Track Width	87.3 in	2217 mm
Lighting and Reflectors	Meets Federal/Canada Motor Vehicle Safety Standard 571.108	
Electrical Connection to Towing Vehicle	7-Pole Round SAE J560 Connector	
Standard Trailer Coupling	3" (78 mm) Pintle Eye	
Optional Trailer Coupling	2-5/16" Ball Coupler	
Hitch Height	4-Position Adjustment	
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)	260 in	6604 mm	196.5 in	4991 mm
Width (B)	98.5 in	2502 mm	73.4 in	1865 mm
Height (C)	119.8 in	3043 mm	100.4 in	2550 mm
Weight (Shipping) without fuel	18946 lb	8611 kg	17058 lb	7753 kg
Weight (Ready to Run) with fuel	23684 lb	10765 kg	21796 lb	9907 kg
Sound Level @ 23ft (7m), 75% Load	75 dB(A)			