



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.

| Voltage Configuration | Frequency (Hz) | Power Factor | Prime Power Rating | | |
|------------------------|----------------|--------------|--------------------|-----|-------------|
| | | | kVA | kW | Current (A) |
| 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 | 255 | 255 | 1063 |

* 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

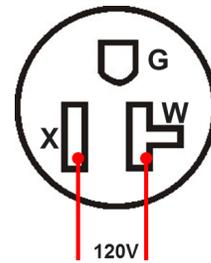
- All models are covered by a comprehensive limited warranty:
 - Package: 1 year / 3000 hours
 - Cummins engine: 1 year / unlimited hours or 2 years / 2000 hours
 - Leroy Somer alternator: 2 years / 4000 hours

| 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 | |

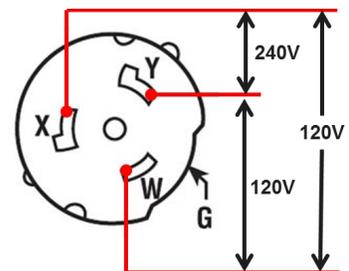
| Fluid Capacities | | Gal | L |
|--|---------|-------------|-------------|
| Engine Crankcase Lubricant Capacity | | 24 | 90.9 |
| Cooling System Capacity | | 8.7 | 32.9 |
| Usable Fuel Cell Capacity | | 656 | 2483.2 |
| Usable DEF Tank Capacity | | 46.4 | 174 |
| 60Hz Fuel Consumption | Gal / h | L / 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—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 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 | |
| Motor Starting Capability | 480V | 600V |
| SkVA @ 20% Voltage Dip | 1100 | N/A |
| SkVA @ 25% Voltage Dip | 1400 | N/A |
| SkVA @ 30% Voltage Dip | 1800 | N/A |
| SkVA @ 35% Voltage Dip | 2113 | N/A |

| Power Connections | |
|---|------------------|
| Main Circuit Breaker Rating | 2000 A |
| Overcurrent Trip Setpoint (240V-1Ø) | 1074 A |
| Overcurrent Trip Setpoint (208V-3Ø & 240V-3Ø) | 1804 A |
| Overcurrent Trip Setpoint (240V-3Ø Delta) | N/A |
| Overcurrent Trip Setpoint (480V-3Ø) | 782 A |
| Overcurrent Trip Setpoint (600V-3Ø) | N/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

Doosan Automatic Start Stop Controller



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 | 18836 lb | 8544 kg | 16948 lb | 7687 kg |
| Weight (Ready to Run) with fuel | 23574 lb | 10693 kg | 21686 lb | 9836 kg |
| Sound Level @ 23ft (7m), 75% Load | 75 dB(A) | | | |