

Rental Power 500 kW



> Specification sheet

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Description

This Cummins Power Generation rental package is a fully integrated mobile power generation system, providing optimum performance, reliability and versatility for standby and prime power applications.



This generator set is designed in facilities certified to ISO9001 and manufactured in facilities certified to ISO9001 or ISO9002.



All low voltage models are CSA certified to product class 4215-01.



The Cascade controller is Listed to UL508 - Category NITW7 for U.S. and Canadian usage. Circuit breaker assemblies are UL489 Listed for 100% continuous operation.

U.S. EPA

Certified to U.S. EPA Mobile Off-Highway Standards.

Features

Cummins diesel engines

- Lightweight, compact, and excellent fuel economy.
- Operate at up to 45° C (113° F) with no effect on output.
- Equipped with heavy duty air cleaners and bypass-type oil filters.
- Equipped with electronic governor.
- Includes jacket water heaters for more reliable operation in emergency standby applications.

Engine controls

- The most advanced, reliable, and capable generator set control system available in the market today.
- Integrated generator set governing, voltage regulation, protection, and paralleling functionality in one easy-to-operate customer interface.
- Multiple units and grid paralleling capable.
- Remote monitoring and operation ready.
- Integrated ground fault indication.
- Optional freestanding, electronically operated, closed-transition transfer switches are available.

Stamford® alternators

- Designed and built by Cummins Power Generation.
- Fully automatic paralleling capability and voltage reconnectable (480/277 VAC High Wye to 208/120 VAC Low Wye).
- Oversized alternator for improved motor starting and low temperature rise in prime and continuous applications.
- Permanent magnet excitation for improved performance in cyclic and non-linear load applications.

Model	kW rating		Cummins engine model	Sound level dBa @7m	Generator specification sheet #	Hours of operation (75% load)	
	Standby	Prime				Standby	Prime
DFED	500	455	KTA19-G4	76	S-1228 50 Hz S-1237 60 Hz	21	23

Cummins cooling system

- Optimized for maximum efficiency and minimum noise.
- Propylene glycol coolant for greater environmental protection.

Custom switchgear

- Designed and built to meet severe customer requirements.
- Automatic start/stop control for applications using automatic transfer switches.
- Easy connection to existing installations using lugs or installed CAM-LOK® connectors.
- 5-cycle closure, motor-operated circuit breaker for automatic paralleling.
- Convenient shore power connection provides power to interior lighting, jacket water heaters, battery charger, and alternator anti-condensation space heaters allowing quick starts even in arduous applications.

ISO container enclosure

- Easy to transport.
- Optimal unit protection with minimum size.
- Optimized fuel capacity.
- Fluid containment design for greater environmental protection.
- Sound attenuated to minimize impact on local environment.
- Vertical cooling air and engine exhaust path to minimize sound level adjacent to the container.
- Equipped with 120 VAC and 24 VDC lighting.

Running gear

- 20-foot sliding bogie chassis.
- 5 foot extension work area for convenience.
- Anti-lock brake system.

Control System



Optional Features Shown

PowerCommand control with AmpSentry™ protection

- Integrated automatic voltage regulator and engine speed governor
- AmpSentry protection guards the electrical integrity of the alternator and power system from the effects of overcurrent, over/under voltage, under frequency and overload conditions
- Control components designed to withstand the vibration levels typical in generator sets

Standard control description

- | | |
|---|--|
| <ul style="list-style-type: none"> • Analog % of current meter (amps) • Analog AC frequency meter • Analog AC voltage meter • Analog % of load meter (kW) • Cycle cranking control • Digital display panel • Emergency stop switch • Idle mode control • Menu switch | <ul style="list-style-type: none"> • Panel backlighting • Remote starting, 12 volt, 2 wire • Reset switch • Run-off-auto switch • Sealed front panel, gasketed door • Self diagnostics • Separate customer interconnection box • Voltmeter/Ammeter phase selector switch |
|---|--|

Standard Protection Functions

Warnings

- High coolant temperature
- High DC voltage
- Low coolant temperature
- Low DC voltage
- Low oil pressure
- Over current
- Oil pressure sender fault
- Overload load shed contacts
- Temperature sender fault
- Up to four customer fault inputs
- Weak battery

Shutdowns

- Emergency stop
- Fail to crank
- High AC voltage
- High coolant temperature
- Low coolant level (option for alarm only)
- Low AC voltage
- Low oil pressure
- Magnetic pickup failure
- Overcrank
- Overcurrent
- Overspeed
- Short circuit
- Underfrequency

Standard performance data

AC alternator data

- Current by Phase
- Kilowatts
- Kilowatt Hours
- Power Factor
- Voltage Line to Line
- Voltage Line to Neutral

Engine data

- Battery voltage
- Coolant temperature
- Engine running hours
- Engine starts counter
- Oil pressure
- Oil temperature
- RPM

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Ratings definitions

Standby:

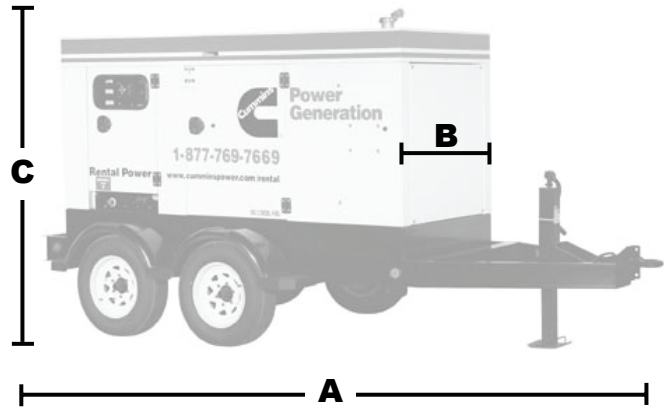
Applicable for supplying emergency power for the duration of normal power interruption. No sustained overload capability is available for this rating. Nominally rated. (Equivalent to Fuel Stop Power in accordance with ISO3046, AS2789, DIN6271, and BS5514.)

Prime (unlimited running time):

Applicable for supplying power in lieu of commercially purchased power. Prime power is the maximum power available at a variable load for an unlimited number of hours. A 10% overload capability is available for limited time. Nominally rated. (Equivalent to Prime Power in accordance with ISO8528 and Overload Power in accordance with ISO3046, AS2789, DIN6271, and BS5514.)

Base load (continuous)

Applicable for supplying power continuously to a load for this rating. Nominally rated. Consult authorized distributor for rating. (Equivalent to Continuous Power in accordance with ISO8528, ISO3046, AS2789, DIN6271, and BS5514.)



Dimensions

Model	Dim "A" mm (in.)	Dim "B" mm (in.)	Dim "C" mm (in.)	Weight w/o fuel kg (lbs)	Weight with fuel kg (lbs)	Fuel capacity liters (gal)
DFED	7620 (300)	2438 (96)	3658 (144)	18545 (40800)	20320 (44705)	2082 (550)

Note: All weights and dimensions are without trailer.

Cummins Power Generation

1400 73rd Avenue N.E.
 Minneapolis, MN 55432 USA
 Telephone: (763) 574-5000
 USA Toll-free: (877) 769-7669
 Fax: (763) 574-5298

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