

Rental Power 2000 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.

Features

Cummins diesel engines

- Rugged 4-cycle industrial diesel delivers reliable power and fast response to load changes.
- Equipped with heavy duty air cleaners, bypass-type oil filters, and additional fuel filtration.
- Includes jacket water heaters for more reliable operation in emergency standby applications.

Control system

- The most advanced, reliable, and capable generator set control system available in the market today.
- Integrated generator set providing precise frequency and voltage regulation, alarm and status message display in one easy-to-operate customer interface.
- Remote monitoring and operation ready.
- Auto shutdown at fault detection.

Stamford alternators

- Designed and built by Cummins Power Generation.
- Voltage (480/277 VAC).
- Oversized alternators 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.

Rental package enclosure

- Designed for serviceability access.
- 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.

Model	Standby rating		Prime rating		Engine model	Alternator model
	60 Hz kW (kVA)	50 Hz kW (kVA)	60 Hz kW (kVA)	50 Hz kW (kVA)		
C2000D2R	2000 (2500)	1600 (2000)	1800 (2250)	1440 (1800)	QSK60-G7	P734F1

Engine specifications

Engine model	QSK60-G7
Alternator data sheet	P734F1
Engine data sheet	DS-6439-LP
EPA Nonroad	Tier 1 (TPEM)
Design	4 cycle, V-block, turbocharged and low temperature after-cooled
Bore	158.8 mm (6.25 in.)
Stroke	190.0 mm (7.48 in.)
Displacement	60.2 liters (3673 in ³)
Cylinder block	Cast iron, 60° V 16 cylinder
Battery capacity	8D (qty: 4) 1250 CCA @ 0° F and 1500 CCA @ 32° F
Battery charging alternator	24 volt 55 amp Delco Remy
Starting voltage	24 volt, negative ground
Fuel system	Direct injection: number 2 diesel fuel
Fuel filter	Triple element, 10 micron filtration, spin on fuel filters with water separator. Additional Fleetguard Industrial Pro pre-filters
Air cleaner type	2-Stage dry replaceable element with dust ejector
Lube oil filter type(s)	Four spin-on combination full flow and bypass filters
Standard cooling system (60 Hz)	45° C (113° F) @ 100 % prime and 40° C (104° F) @ 100 % standby
Standard cooling system (50 Hz)	50° C (122° F) @ 100 % prime and 45° C (113° F) @ 100 % standby

Alternator specifications

Design	Brushless, 4-pole, revolving field
Stator	Double layer lap 2/3 pitch
Rotor	Salient Pole, single bearing
Insulation system	Class F per NEMA MG1-1.65 and BS2757
Standard temperature rise	105/40° C prime
Exciter type	Brushless
Phase rotation	A (U), B (V), C (W)
Alternator cooling	Air Cooled-ICO1
AC waveform total harmonic distortion	Non distorting bal linear load <5%
Telephone influence factor (TIF)	<50 per NEMA MG1-22.43
Telephone harmonic factor (THF)	<3

Power capability specifications

	Standby rating			
	240 V, 1 phase Amps	208 V, 3 phase Amps	480 V, 3 phase Amps	600 V, 3 phase Amps
C2000D2R	N/A	N/A	3000 amp	N/A

Electrical power panel specifications

Model voltage	120 V duplex receptacles	240 V twist	Load lug connection (stud diameter)	Load lug circuit breakers
480 V	N/A	N/A	8 x 1/2 inch	3000 Amp

Site derating factors

Standby application: The engine may be operated at 1800 rpm (60 Hz) up to 3400 ft (1036 m) and 104 °F (40 °C) without power deration. For sustained operation above the conditions, derate by 5.4% per 1000 ft (300 m) and 1% per 10 °F (13.4% per 11 °C).

Standby application: The engine may be operated at 1500 rpm (50 Hz) up to 3198 ft (975 m) and 104 °F (40 °C) without power deration. For sustained operation above the conditions, derate by 2.7% per 1000 ft (300 m) and 1% per 10 °F (17% per 11 °C).

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Control system

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

- 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
- Panel backlighting
- Remote starting, 12 volt, 2 wire
- Reset switch
- Run-Off-Auto switch
- Sealed front panel, gasketed door
- Self diagnostics
- Voltmeter/Ammeter phase selector switch

Standard performance data warnings

- High Coolant Temperature
- High DC Voltage
- Low Coolant Temperature
- Low DC Voltage
- Low Oil Pressure
- Over Current
- Overload Load Shed Contacts
- Up to Four Customer Fault Inputs
- Weak Battery
- Overflow
- Overspeed
- Short Circuit
- Underfrequency

Standard protection functions

- Voltmeter/ammeter phase selector
- Warnings
- High Coolant Temperature
- High DC Voltage
- Low Coolant Temperature
- Low DC Voltage
- Low Oil Pressure
- Over Current
- Overload Load Shed Contacts
- Up to Four Customer Fault Inputs
- Weak Battery
- Overflow

Shutdowns

- Emergency Stop
- Fail to Crank
- High AC Voltage
- High Coolant Temperature
- Low Coolant Level
- Low AC Voltage
- Low Oil Pressure
- Overcurrent
- Overspeed
- Short Circuit
- Underfrequency



Optional Features Shown

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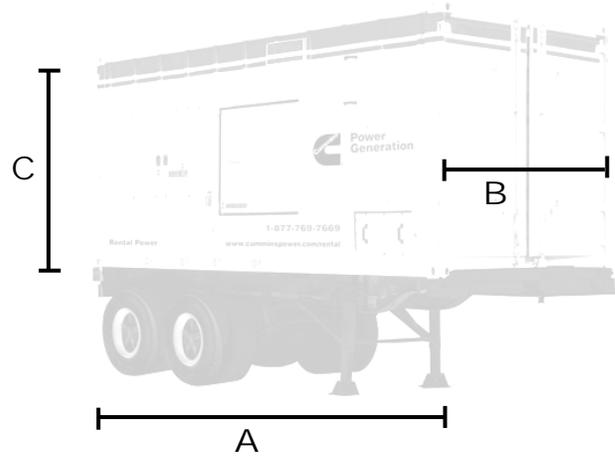
Ratings definitions

Standby:

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

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. (Equivalent to Prime Power in accordance with ISO8528 and Overload Power in accordance with 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)
C2000D2R	12192 (480)	2438 (96)	2896 (114)	34516 (76095)	38524 (84931)	7473 (1977)

Specifications

Model	KW rating		Sound level dB(A) @ 7 m	Tier rating Standby	Hours of operation (75% load)	
	Standby	Prime			Standby	Prime
60 Hz	2000	1800	91	Tier 1 (TPEM)	17	19
50 Hz	1600	1440	91	Tier 1 (TPEM)	22	25



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



The Prototype Test Support (PTS) program verifies the performance integrity of the generator set design. Cummins Power Generation products bearing the PTS symbol meet the prototype test requirements of NFPA 110 for Level 1 systems.

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