

Rental Power 200 kW



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

- U.S. EPA Tier III compliant
- Rugged 4-cycle industrial diesel engine with excellent transient performance
- Lightweight, compact and excellent fuel economy
- 2-stage spin on fuel filter w/pre-filter water separator with drain
- Equipped with heavy duty, 2-stage air cleaners with dust ejector

Control features

- The most advanced, reliable and capable generator set control system on the market today
- Controls provide 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

Engine controls

- Oil Pressure and Water Temp Gauge
- Fuel Level Gauge & Battery Voltage Gauge
- Hour meter

Stamford alternators

- 12-lead reconnectable alternators fitted with voltage selection switch
- Permanent magnet excitation for improved performance in non-linear load applications

Rental package enclosure

- Sound attenuated, white powder coated lockable enclosure
- Roof mounted, single point lift
- Cooling system rated for 120° F (50° C) ambient
- Complete engine fluid containment reservoir
- Shore power (120 VAC) - No breakers in shore power connection.

Standard generator electrical features

- Single phase convenience receptacles
- Distribution panel with L1, L2, L3 neutral and ground
- Main line shunt trip type circuit breaker
- Auto start-stop with remote contacts
- Over current sensing
- 3 available auxiliary connections

Generator electrical options

- Multiple voltage selector switch (480/277 VAC/ 3 phase or 208/120 VAC/3 phase or 240/120 VAC/ 1 phase
- 600V/480V switchable
- Barrel lug connection
- Cam lock distribution panel
- Heated HMI

Additional rental package features

- Tank style coolant heater
- Low coolant shutdown system
- Battery disconnect switch
- Base mount generator – see Options for trailers

Rental package options

- DOT approved electric brake trailer with heavy duty center mounted jack, ball or pintle hitch
- DOT approved hydraulic brake trailer with heavy duty center mounted jack, ball or pintle hitch
- 110V, 5 Amp battery charger
- 20 hour fuel tank (100% prime) with gauge
- Transport Canada UN31A compliant fuel tank

| Model | Voltages (V) | Standby Rating | | Prime Rating | | Engine model | Alternator model |
|---------|--------------------|----------------|----------------|----------------|----------------|--------------|------------------|
| | | 60 Hz kW (kVA) | 50 Hz kW (kVA) | 60 Hz kW (kVA) | 50 Hz kW (kVA) | | |
| C200D6R | 208/480 | 200 (250) | | 180 (225) | | QSB7-G5 | UCDI274J |
| | 480/600 switchable | 200 (250) | | 180 (225) | | QSB7-G5 | HCI434C |

Engine specifications

| | |
|-----------------------------|--|
| Engine model | QSB7-G5 |
| Alternator data sheet | UCDI274J (208/480), HCI434C (480/600) |
| Engine data sheet | DS-92278 |
| Tier rating | TPEM (Tier III) |
| Design | 4 cycle, In-Line, turbocharged and after-cooled |
| Bore | 107 mm (4.21 in.) |
| Stroke | 124.0 mm (4.88 in.) |
| Displacement | 6.69 liters (408 in ³) |
| Cylinder block | Cast iron, In-Line 6 cylinder |
| Battery capacity | 2 x 750 cca |
| Battery charging alternator | 100 amps |
| Starting voltage | 12 volt, negative ground |
| Fuel system | Direct injection HPCR system |
| Fuel filter | Spin on fuel filter with water separator |
| Air cleaner type | 2-stage, dry replaceable element with dust ejector |
| Lube oil filter type(s) | Single spin-on, full flow |
| Standard cooling system | 122° F (50° C) ambient radiator |

Alternator specifications

| | |
|---------------------------------------|---|
| Design | Brushless, 4 pole, drip proof revolving field |
| Stator | Double layer concentric, 2/3 winding pitch |
| Rotor | Single bearing, flexible disc |
| Insulation system | Class H per NEMA MG1-1.65 (208/480 VAC) Class F per NEMA MG1-1.65 (480/600 VAC switchable) |
| Standard temperature rise | 115/50° C prime (208/480 VAC) 95/50° C prime (480/600 VAC switchable) |
| Exciter type | PMG (permanent magnet generator) |
| Phase rotation | A (U), B (V), C (W) |
| Alternator cooling | Direct drive centrifugal blower fan |
| AC waveform total harmonic distortion | < 1.5% no load, < 5% non-distorting balance linear load |
| Telephone influence factor (TIF) | < 50 per NEMA MG1-22.43 |
| Telephone harmonic factor (THF) | < 2% |

Power capability specifications (Assume power factor = 0.80 for 3 phase amps)

| | Standby rating | | | |
|----------------|---------------------|---------------------|---------------------|---------------------|
| | 240 V, 1 phase Amps | 208 V, 3 phase Amps | 480 V, 3 phase Amps | 600 V, 3 phase Amps |
| C200D6R | 542 | 694* | 301 | 241 |

* 240V, 3 phase = 601A

Electrical power panel specifications

| Model voltage | 120 V duplex receptacles | 240 V twist | Load lug connection (stud diameter) | Load lug circuit breakers |
|--------------------------------|--------------------------|-------------|-------------------------------------|---------------------------|
| 120/480 Volt | 2 - 20 Amp GFCI | 3 - 50 Amp | 1/2 inch | 800 Amp |
| 480/600 Volt switchable | 0 | 0 | 1/2 inch | 400 Amp |

Site derating factors

Standby application: The engine may be operated at 1800 rpm up to 3,000 ft (915 m) and 122° F (50° C) without power deration. For sustained operation above these conditions, derate by 4% per 1,000 ft (300 m), and 8% per 18° F (10° C).

Control system

PowerCommand control

- Integrated automatic voltage regulator and engine speed governor
- Control components designed to withstand the vibration levels typical in generator sets

Standard control description

- Analog AC frequency meter
- Analog AC voltage meter
- Cycle cranking control
- Digital display panel
- Idle mode control
- Menu switch
- Panel backlighting
- Remote starting, 12 V, 2 wire
- Reset switch
- Run-off-auto switch
- Sealed front panel, gasketed door
- Self diagnostics

Standard performance data warnings

- High coolant temperature
- High DC voltage
- Low coolant temperature
- Low DC voltage
- Low oil pressure
- Over current
- Weak battery
- Over speed
- Under frequency
- Intake manifold temperature OOR high/low
- Intake manifold temperature high
- Water in fuel OORH/OORL
- General engine fault
- Coolant level OOR high/low

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
- Weak battery

Shutdowns

- Emergency stop local/remote
- Fail to crank
- High AC voltage
- High coolant temperature
- Low coolant level
- Low AC voltage
- Low oil pressure
- Over current
- Over speed
- Under frequency
- Intake manifold temperature high
- Fail to start/stop
- Over frequency
- Alternator reconnecting switch operated (breaker closed)

Agency approvals

- NFPA110 for Levels 1 or 2 systems
- ISO 8528-4: 1993 Compliance, Controls and Switchgear
- CE Marking
- EN 50081-1, 2 Residential/Light Industrial Emissions or Industrial Emissions
- EN 50082-1.2
- ISO 7637-2, Level 2: DC supply surge test
- Mil Std 202C, Method 101 and ASTM B117: Salt Fog Test
- Designed and manufactured in ISO 9001 certified facilities. Suitable for use on generator sets that are UL 2200 Listed



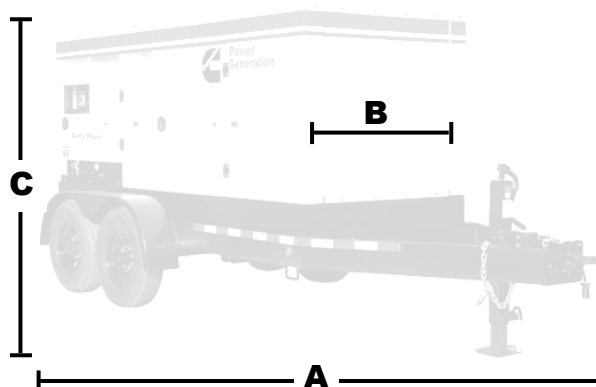
Ratings definitions

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) |
|---------------------|---------------------|---------------------|---------------------|-----------------------------|------------------------------|-------------------------------|
| C200D6R | 3700 (146) | 1450 (57) | 1700 (67) | 2721 (5999) | 3542 (7810) | 965 (255) |
| With trailer | 5740 (226) | 2140 (84) | 2309 (91) | 3529 (7782) | 4351 (9593) | 965 (255) |

Fuel consumption

| 60 Hz Ratings, kW (kVA) | Load | Standby | | | | Prime | | | |
|-------------------------|-----------|-----------|-----|------|------|-----------|------|------|------|
| | | 200 (250) | | | | 180 (225) | | | |
| | | 1/4 | 1/2 | 3/4 | Full | 1/4 | 1/2 | 3/4 | Full |
| | US Gal/hr | 5 | 9.5 | 12.9 | 14.8 | 4.5 | 7.8 | 10.9 | 13.0 |
| | L/hr | 18.9 | 36 | 48.8 | 56 | 17 | 29.5 | 41.3 | 49.2 |

Specifications

| Model | KW rating | | Sound level at full load dB(A) @ 7 m | Tier rating | Hours of operation (75% load) | |
|----------------|-----------|-------|---|-------------|-------------------------------|-------|
| | Standby | Prime | | | Standby | Prime |
| C200D6R | 200 | 190 | 70.5 | Tier III | 20 | 23 |

Trailer information

| Model | Tire size | Tire type | Load range | Number of tires per trailer | Lug pattern |
|----------------|------------|-----------|-----------------|-----------------------------|-------------|
| C200D6R | 235/85-R16 | Radial | 2755 lbs - each | 4 | 8 hole |

Certifications

These generator sets are certified to following standards:



CAN/CSA STD C22.2 NO. 100-04
CAN/CSA STD C22.2 NO. 14-05

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