## **Specification sheet**



# Rental Power 300 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 distributionpanel
- 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
- 110V, 5 Amp battery charger
- 20 hour fuel tank (100% prime) with gauge
- Transport Canada UN31A compliant fuel tank

		Standby	y Rating	Prime Rating			
Model	Voltages (V)	60 Hz kW (kVA)	<b>50 Hz</b> kW (kVA)	60 Hz kW (kVA)	<b>50 Hz</b> <b>kW</b> (kVA)	Engine model	Alternator model
0000000	208/480	<b>300</b> (375)		<b>270</b> (337)		QSM11-G4	HCI434E
C300D6R	480/600 switchable	<b>300</b> (375)		<b>270</b> (337)		QSM11-G4	HCI434F

# **Engine specifications**

Engine model	QSM11-G4
Alternator data sheet	HCI434E (208/480), HCI434F (480/600 switchable)
Engine data sheet	FR-20138
Tier rating	TPEM (Tier III)
Design	4 cycle, In-Line, turbocharged and after-cooled
Bore	125 mm (4.92 in)
Stroke	147 mm (5.79 in)
Displacement	10.8 liters (661 in <sup>3</sup> )
Cylinder block	Cast iron, in-line 6 cylinder
Battery capacity	1000 CCA GR31
Battery charging alternator	70 amps
Starting voltage	24 volt, negative ground
Fuel system	Cummins Celect: No.2 diesel fuel
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)	Full flow bypass combo filter
Standard cooling system	122° F (50° C) ambient radiator

# **Alternator specifications**

Design	Brushless, 4 pole, drip proof revolving field
Stator	2/3 pitch
Rotor	Singe bearing, flexible disc
Insulation system	Class F per NEMA MG1-1.65
Standard temperature rise	95/50 °C prime
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					
C300D6R	903	1040	451	361					

# **Electrical power panel specifications**

120 V duplex			Load lug connection	Load lug circuit
Model voltage	receptacles	240 V twist	(stud diameter)	breakers
120/480 Volt	2 - 20 Amp	3 - 50 Amp	1/2 inch	1200 Amp
480/600 Volt switchable	0	0	1/2 inch	600 Amp

# **Site derating factors**

Standby application: The engine may be operated at 1800 rpm up to 305 m (1000 ft) and 50° C (122° F) without power deration. For sustained operation above these conditions, derate by 4% per 300 m (1,000 ft), and 11% per 10° C (18° F).

# **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



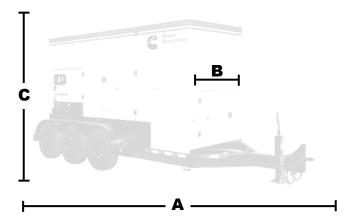
# **Ratings definitions**

## 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	<b>Dim "A"</b> <b>mm</b> (in.)	Dim "B" mm (in.)	Dim "C" mm (in.)	Weight w/o fuel ka (lbs)	Weight with fuel kg (lbs)	Fuel capacity liters (gal)
C300D6R	4191 (165)	1575 (62)	2439 (96)	4780 (10450)	6068 (13380)	1514 (400)
With trailer	6223 (245)	2489 (98)	2921 (115)	6119 (13493)	7407 (16333)	1514 (400)

# **Fuel consumption**

		Star	ndby			Pri	me		
60 Hz Ratings, kW (kVA)	300 (375)				270	<b>270</b> ( <b>337</b> )			
	Load	1⁄4	1/2	3⁄4	Full	1⁄4	1/2	3⁄4	Full
	US Gal/hr	7.2	11.8	17	23	6.5	10.8	15	19.8
	L/hr	27.3	44.7	64.4	87.1	24.6	40.9	56.8	75

## **Specifications**

	KW	rating	Sound level at full load	Tier rating	Hours of operation (75% load)		
Model	Standby	Prime	dB(A) @ 7 m	Standby	Standby	Prime	
C300D6R	300	270	72	Tier III	23	26	

# **Trailer information**

_	Model	Tire size	Tire type	Load range	Number of tires per trailer	Lug pattern
_	C300D6R	ST235/85R16	Radial	E	6	8 x 6.5

# 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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