

Exhaust Emission Data Sheet C200D6D

60 Hz Diesel Generator Set

Engine Information:

Model:Cummins QSB7-G5 NR3Bore:4.21 in. (106.9 mm)Type:4 cycle, in-line, 6 cylinder dieselStroke:4.88 in. (123.9 mm)Aspiration:Turbocharged and Charge AirDisplacement:408 cu. in. (6.7 liters)

Cooled

Compression Ratio: 17.2:1 Exhaust Stack Diameter: 4 in (101.6 mm)

Emission Control Device: Turbocharged and Charge Air

Cooled

	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>	<u>Full</u>	<u>Full</u>	
Performance Data	Standby	Standby	Standby	Standby	<u>Prime</u>	
BHP @ 1800 RPM (60 Hz)	106.9	173.9	241	306.2	277.6	
Fuel Consumption (gal/Hr)	5.7	8.7	11.7	14.7	13.4	
Exhaust Gas Flow (CFM)	784.8	1125.5	1272.1	1439.3	1335.8	
Exhaust Gas Temperature (°F)	723.1	816.5	876.7	954.4	904.2	
Exhaust Emission Data						
HC (Total Unburned Hydrocarbons)	0.24	0.10	0.04	0.03	0.03	
NOx (Oxides of Nitrogen as NO ₂)	1.87	2.08	2.94	4.65	4.06	
CO (Carbon Monoxide)	1.54	0.75	0.33	0.19	0.22	
PM (Particulate Matter)	0.15	0.09	0.05	0.02	0.03	
Smoke (Bosch)	0.71	0.62	0.44	0.25	0.23	
Sulfur Dioxide (SO ₂)	0.17	0.16	0.15	0.14	0.14	
			All values (All values (except smoke) are cited: g/BHP-hr		

Test Conditions

Data is representative of steady-state engine speed (± 25 RPM) at designated genset loads. Pressures, temperatures, and emission rates were stabilized.

Fuel Specification: ASTM D975 No. 2-D diesel fuel with 0.03-0.05% sulfur content (by weight), and

40-48 cetane number.

Fuel Temperature: 99 ± 9 °F (at fuel pump inlet)

Intake Air Temperature: 77 ± 9 °F Barometric Pressure: 29.6 ± 1 in. Hg

Humidity: NOx measurement corrected to 75 grains H₂O/lb dry air

Reference Standard: ISO 8178

The NOx, HC, CO and PM emission data tabulated here are representative of test data taken from a single engine under the test conditions shown above. Data for the other components are estimated. These data are subjected to instrumentation and engine-to-engine variability. Field emission test data are not guaranteed to these levels. Actual field test results may vary due to test site conditions, installation, fuel specification, test procedures and instrumentation. Engine operation with excessive air intake or exhaust restriction beyond published maximum limits, or with improper maintenance, may results in elevated emission levels.