



Exhaust Emission Data Sheet

1250DQGAA

60 Hz Diesel Generator Set

Engine Information:

Model:	Cummins Inc QSK50-G4 NR2	Bore:	6.25 in. (159 mm)
Type:	4 Cycle, 60°V, 16 Cylinder Diesel	Stroke:	6.25 in. (159 mm)
Aspiration:	Turbocharged and Low Temperature Aftercooled	Displacement:	3067 cu. In. (50.2 liters)
Compression Ratio:	15.0:1		
Emission Control Device:	Turbocharged and Low Temperature Aftercooled		

	1/4	1/2	3/4	Full	Full
PERFORMANCE DATA	Standby	Standby	Standby	Standby	Prime
BHP @ 1800 RPM (60 Hz)	462.5	925	1387.5	1850	1628
Fuel Consumption (gal/Hr)	29.1	49	69.5	90.5	81.0
Exhaust Gas Flow (CFM)	4298.6	6623	8659	10983.5	9707.0
Exhaust Gas Temperature (°F)	627.3	692.3	727	840	743.0
EXHAUST EMISSION DATA					
HC (Total Unburned Hydrocarbons)	0.46	0.23	0.15	0.09	0.11
NOx (Oxides of Nitrogen as NO2)	3.72	3.79	4.16	4.82	4.25
CO (carbon Monoxide)	1.31	0.66	0.42	0.4	0.32
PM (Particular Matter)	0.27	0.13	0.06	0.02	0.03
SO2 (Sulfur Dioxide)	0.01	0.01	0.01	0.01	0.01
Smoke (Bosch)	0.64	0.43	0.24	0.13	0.14

All values are Grams per HP-Hour, Smoke is Bosch#

TEST CONDITIONS

Data is representative of steady-state engine speed (± 25 RPM) with full load ($\pm 2\%$). Pressures, temperatures, and emission rates were stabilized.

Fuel Specification:	ASTM D975 No. 2-D diesel fuel with ULSD, and 40-48 cetane number
Fuel Temperature:	99 \pm 9 °F (at fuel pump inlet)
Intake Air Temperature:	77 \pm 9 °F
Barometric Pressure:	29.6 \pm 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 result in elevated emission levels.