

Exhaust Emission Data Sheet C36 N6

60 Hz Spark Ignited Generator Set EPA Emissions

Engine Information:

Model:QSJ2.4Bore:3.41 in. (86.5 mm)Type:4 Cycle, In-line, 4 CylinderStroke:3.94 in. (100 mm)Aspiration:Turbocharged AftercooledDisplacement:146.46 cu. in. (2.4 liters)

Compression Ratio: 9.5:1

Emission Control Device: Electronic Air/Fuel Ratio Control and Closed-Loop Breather System

	Natural Gas	Propane
PERFORMANCE DATA	<u>Standby</u>	<u>Standby</u>
BHP @ 1800 RPM (60 Hz)	70	70
Fuel Consumption (SCFH)	472.3	182.7
Air to Fuel Ratio	16.4	14.6
Exhaust Gas Flow (CFM)	260.2	225.9
Exhaust Gas Temperature (°F)	1400	1475
EXHAUST EMISSION DATA		
HC (Total Unburned Hydrocarbons)*	39	419
NOx (Oxides of Nitrogen as NO2)	1260	1188
CO (Carbon Monoxide)	9972	17657
·		Values are ppmvd
HC (Total Unburned Hydrocarbons)*	0.06	0.52
NOx (Oxides of Nitrogen as NO ₂)	5.09	4.04
CO (Carbon Monoxide)	28.30	42.43
•		Values are Grams per HP-Hour

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*HC includes all NMHC, VOC, POC, and ROC constituents (Non-Methane HC, Volatile Organic Compounds, Precursor Organic Compounds, and Reactive Organic Compounds)

TEST CONDITIONS

Data was recorded during steady-state rated engine speed (\pm 25 RPM) with full load (\pm 2%). Pressures, temperatures, and emission rates were stabilized.

Fuel Specification:

Natural Gas: Dry gas as received from Supplier (1000 BTU/SCF).

Propane: Meets the requirements for Commercial Grade Propane under the ASTM D1835 Standard

Specification for Liquefied Gases

Fuel Temperature 60 ± 9 °F at Flow Transmitter

Fuel Pressure 14.73PSIA ± 0.5 PSIA at Flow Transmitter

Intake Air Temperature: 77 ± 9 °F at inlet Barometric Pressure: 29.92 in. Hg ± 1 in. Hg

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

The NOx, HC, and CO emission data tabulated here were from a single engine under the test conditions shown above. 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 limit, or with improper maintenance, may results in elevated emission levels.