



# Exhaust emission data sheet

## 100GGHH

### 60 Hz Spark ignited generator set

### EPA emissions

**Engine information:**

Model:	WSG-1068	Bore:	3.55 in. (90.2 mm)
Type:	4 cycle, V-10 cylinder spark-ignited	Stroke:	4.17 in. (105.9 mm)
Aspiration:	Turbocharged	Displacement:	412.5 cu. in. (6.8 liters)
Compression ratio:	9.0:1		
Emission control device:	Electronics air/fuel ratio control, 3-way catalyst, and closed-loop breather system.		

<u>Performance data</u>	<u>Natural gas</u>	<u>Propane</u>
	<u>Standby</u>	<u>Standby</u>
Genset rating (kW) @ 1800 RPM (60 Hz)	100	100
BHP @ 1800 RPM (60 Hz)	153.2	153.2
Fuel consumption (SCFH)	1175.8	466.6
Air to fuel ratio	17.1	15.5
Exhaust gas flow (CFM)	625	609
Exhaust gas temperature (°F)	1063	1031
 <u>Exhaust emission data</u>		
HC (Total unburned hydrocarbons)*	225	92
NOx (Oxides of nitrogen as NO2)	8	16
CO (Carbon monoxide)	0	24
		Values are ppmvd
HC (Total unburned hydrocarbons)*	0.10	0.01
NOx (Oxides of nitrogen as NO2)	0.02	0.01
CO (Carbon monoxide)	0.00	0.01
		Values are Grams per HP-Hour
*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 $\pm$ 9 °F at Flow Transmitter
Fuel pressure	14.73 PSIA $\pm$ 0.5 PSIA at Flow Transmitter
Intake air temperature:	77 $\pm$ 9 °F at inlet
Barometric pressure:	29.92 in. Hg $\pm$ 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.