



Exhaust Emission Data Sheet

500DFEK

60 Hz Diesel Generator Set

EPA NSPS Stationary Emergency

Engine Information:

Model: Cummins Inc. QSX15-G9 NR 2	Bore: 5.39 in. (137 mm)
Nameplate BHP @ 1800 RPM: 755	Stroke: 6.65 in. (169 mm)
Type: 4 Cycle, In-Line, 6 Cylinder Diesel	Displacement: 912 cu. in. (14.9 liters)
Aspiration: Turbo-charged with air-to-air charge air cooling	
Compression Ratio: 17:1	
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	Prime
Engine HP @ Stated Load (1800 RPM)	202	379	555	732	668
Fuel Consumption (gal/hr)	11.3	18.7	25.8	34.7	30.6
Exhaust Gas Flow (CFM)	1400	2150	2730	3625	3160
Exhaust Temperature (°F)	745	830	820	900	880
EXHAUST EMISSION DATA					
HC (Total Unburned Hydrocarbons)	0.18	0.07	0.06	0.11	0.08
NOx (Oxides of Nitrogen as NO2)	2.85	3.60	4.60	4.85	5.15
CO (Carbon Monoxide)	0.45	0.33	0.47	0.31	0.41
PM (particular Matter)	0.08	0.05	0.05	0.05	0.02
Smoke (Pierburg)	0.52	0.55	0.61	0.31	0.38
All values are Grams per HP-Hour					

TEST METHODS AND CONDITIONS

Test Methods:

Steady-State emissions recorded per ISO8178-1 during operation at rated engine speed (+/-2%) and stated constant load (+/-2%) with engine temperatures, pressures and emission rated stabilized.

Fuel Specification:

40-48 Cetane Number, 0.05 Wt.% max. Sulfur; Reference ISO8178-5, 40CFR86.1313-98 Type 2-D and ASTM D975 No. 2-D.

Reference Conditions:

25 °C (77 °F) Air Inlet Temperature, 40 °C (104 °F) Fuel Inlet Temperature, 100 kPa (29.53 in Hg) Barometric Pressure; 10.7 g/kg (75 grains H₂O/lb) of dry air Humidity (required for NOx correction); Intake Restriction set to maximum allowable limit for clean filter; Exhaust Back pressure set to maximum allowable limit.

Data was taken from a single engine test according to the test methods, fuel specification and reference conditions stated above and is subjected to instrumentation and engine-to-engine variability. Tests conducted with alternate test methods, instrumentation, fuel or reference conditions can yield different results.

Data Subject to Change Without Notice.